

Aviation News

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New Chairman of Aero Chamber's Board of Governors: Eugene E. Wilson, vice-chairman of United Aircraft Corporation, who was elected chairman of the Board of Governors of the Aeronautical Chamber of Commerce at the meeting of the trade association's board in Los Angeles last week. Choice of Wilson to the important ACCA post is expected to lend a powerful impetus to the Chamber's efforts toward formulation of a permanent U. S. air policy.

ACCA Urges Strong U. S. Air Policy

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Rider Shuffles Termination Power

Revised Vinson Bill provides authority for dealing with all types of industrial contract cancellations ..Page 12

Washington Observer

Westinghouse Announces

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PLANTS IN 24 CITIES OFFICES EVERYWHERE

A-C WELDERS

AIRPOWER—Centers of the effectiveness of our airpower have their answer in the joint statement of the British Air Ministry and the United States Strategic Air Forces. The Joint plan has been a success, although not yet complete. But it is noteworthy that the persons they are methodically achieving remain the same—the purpose assigned them by the Anglo-American conference which first planned these units. That purpose, which is to overthrow Hitler, is to overthrow him, in the destruction of the German Air Force as a preliminary to the destruction of the German ability and will to continue armed resistance.

PORTENTS OF THINGS TO COME—Look for no important decision out of Washington on any issue not directly concerned with the military program until the invasion is under way. Everything now is directed toward that mighty undertaking and every course of future action depends upon its development. The atmosphere in the Capitol is tense with pre-invasion waiting. The magnificence and seriousness of this unprecedented operation has finally permeated to the lowest government clerk. Routine government business goes on as in Congress routine skirmishes continue, but underneath the tense news periods and lesser programs are being held in abeyance.

PROBLEM OF GROWTH—In the plane for bigger and still bigger airplanes, one important

factor often is overlooked. That is the accuracy of constructing runways which will handle the giants. Many airports are built on flat land or in areas which simply will not handle the type of paving with sufficient strength to hold planes of excessive weight. Every time a new and more daring airport engineer gets a new headache. The size of an airplane, obviously, may have no bounds, but the ability of airports which will hold the weight of the planes may put a limit on aircraft weights.

AIRPORT SITES—At a time when every far-ward-looking community is thinking about strips or landing strips for the air traffic of the future, the comment of an engineer, with considerable cynicism, is that when a town gets ready to build an airport, three men go out to select the site. One a Congressman, the second a taxi leader or a man from the Chamber of Commerce, and the third a real estate dealer. This probably was nearly his way of mentioning necessities to select these airport sites with care.

RETURN TO PEACE TIME BUSINESS—WPA officials are retarding and emphasizing that efforts to beat the gas on the return to peacetime business will be unavailing. Their early result, WPA insists, will be to slow up war production. Chairman Steiger said recently that it is useless for business to become apathetic now.

Artist's cutaway drawing of new Boeing wind tunnel



Harnessing the Volcano

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AVIATION NEWS

May 1, 1944

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ACCA Urges Permanent Air Policy For National Security, World Peace

Executives ask: powerful air force, acquisition of bases, expansion of commerce and preservation of large aircraft industry.

By SCHOLER RANGS

The aircraft manufacturing industry, speaking through its national trade association, the Aerotrust Chamber of Commerce, has urged formulation of a permanent American airpower policy to safeguard national security and assure world peace and prosperity.

Top executives of leading companies, meeting in Los Angeles, agreed on a four-point guide for such a policy:

- Maintenance of Army and Navy air forces at such strength and in such a state of readiness as to pre-

clude a successful assault upon our country or its possessions.

► Adequate and continuation of funds to meet national security and that of overseas allies.

► Facilitating the orderly and economic expansion of domestic and international air transport and private flying.

► Preserving a strong aircraft manufacturing industry.

The statement of the Aero Chamber proved to be a modification of an original proposal, voted down, which was to request President

Roosevelt to appoint a presidential commission, similar to the Morrow Board of 1933, that would evolve government policy to cover aircraft and air transportation during the post-war period.

Eugene E. Wilson, vice-chairman of United Aircraft Corp and new chairman of the Chamber's board of governors, left unarticulated what approach the Chamber might take in behalf of the industry to win assurance in Washington that the aircraft manufacturers will share the peace with enough profits to carry the industry through the conversion period.

Other issues to be taken up: He indicated that the vital cause of contract negotiation, contract terminations and post-war seed money would be taken up at subsequent meetings of the Chamber's executive committee.

A comprehensive "estimate of American air power" issued later



LATEST PHOTO OF NACA MEMBERS:

Members of the NACA posed for this picture at the latest meeting in Washington. **Front Row:** William Durfee, vice-president—engineering, American Airlines; Dr. T. P. Wright, director, Aircraft Resources Control Office, Aircraft Production Board. **Left to right:** Dr. William F. Durand, professor emeritus of mechanical engineering, Stanford University, California; Maj. Gen. Oliver P. Schlesinger, U.S.A., assistant chief of air staff, materiel, maintenance and distribution, Army Air Forces; Dr. Wassner Bush, director, Office of Scientific Research and Development; Vice Adm. John S. McCloskey, U.S.N., deputy chief of naval operations (aviation); Maj. Gen. George M. Giles,

U.S.A., chief of air staff, representing Gen. Henry H. Arnold, commanding general, AF; Dr. Orville Wright; Dr. George W. Lewis, director of aeronautical research, NACA; Dr. Jerome C. Manoske, chairman, NACA; John F. Victory, secretary, NACA; Dr. Charles G. Abbot, astrophysicist, Smithsonian Institution; Dr. Edward Warner, vice-chairman, Civil Aeronautics Board; Dr. Lyman J. Briggs, director, National Bureau of Standards; Rear Admiral Ernest M. Poole, U.S.N., special assistant (material), Bureau of Aeronautics; Rev. William A. M. Barlow, Assistant Secretary of Commerce; Dr. Francis W. Redfield, chief, U.S. Weather Bureau.

to go with the four-point policy program, deals at length with the Monroe Board and it is planned to place it in the hands of members of Congress, military leaders and possibly the White House.

Strong Air Force Urged—The Monroe Board held that a strong air force is vital to national security, that the backbone of that air force must be a strong private industry, and that a long-term continuing program of procurement is essential to the expansion of production, increasing staffs and the acceleration of new technology.

"That," the statement said, "the board finds responsibility for American superiority partly upon the government and partly upon the government and private industry."

The statement's summary of an estimate of the future emphasizes "international, domestic and private air transport after a source of new wealth and employment, rapid development is dependent upon an improved technology stemming from a strong competitive manufacturing industry; domestic military and naval air have supported by adequate air bases as a consequence of free communication by land, sea and air. Only an air-minded people can produce the accompanying air power which, in the hearts of free men is the hope of peace and prosperity."

Financial Honesty—Wilson gave assurance that action of critical interest to the industry such as financial security for post-war transition will develop under the guidance of East and West Coast manufacturers' committees of the Chamber.

Officers Elected

Eugene E. Wilson, vice-chairman of United Aircraft Corp., was named chairman of the Board of Governors of the Aerospace Chamber of Commerce, and the incoming head of the trade association's board in Los Angeles last week.

Douglas Douglas, head of Douglas Aircraft, was named vice-chairman.

Members of the Executive Committee were: W. L. Wilder, Brewster; Ernest R. Borch, Bendix Aviation; Glenn L. Martin, of Glenn L. Martin Co.; and P. G. Johnson, Boeing.

James F. Murray, Boeing vice-president and chief representative, was re-elected president of the Chamber; L. D. Bell, Bell Aircraft, and Lockheed T. Cohn, Northrop, were named vice-president; Col. Harrison Brand, secretary and John R. Morgan, treasurer.

Members of the East Coast Committee are: R. E. Gilman, Sperry chairman; Glenn L. Martin of Glenn L. Martin Co.; J. Carlton Ward, Jr., Fairchild, William Marland, American Can; Alfred M. Rohrbach, Eastern Aircraft; Ernest Borch, Brewster; L. D. Bell, Bell Aircraft; C. J. Becker, Waco Aircraft and Wilson, West Coast members.

Harry Woolhead, Consolidated Vultee, chairman; J. H. Knobell, Berliner, North America; Robert E. Gross, Lockheed; T. Claude Ryan, Ryan; Lamont T. Cohn, Northrop; P. F. Johnson, Boeing, and Donald Douglas, of Douglas.

30,000 Lend-Lease Planes Sent Allies

3,100 turned over in first 60 days of this year, Crowley reports.

Thirty thousand airplanes have been shipped by the United States to its allies in the three years of Lend-Lease operations, of which more than 3,100 were turned over during the first 60 days of this year.

Gen. T. Crowley, Foreign Economic Administrator, in making his report to Congress that between Dec. 11, 1941, and April 1, 1944, the United States sent about one fifth of its aircraft production abroad, \$24,480,000,000. The value of the planes sent under Lend-Lease was set at \$1,168,800,000 while those purchased by our allies had a value of \$608,800,000.

Crowley said that, while the Russians and British produce most of the planes their forces use, our Lend-Lease planes have been a vital supplement to their output. "American planes in the hands of Russians, British, Australian, Chinese, Dutch and other Allied forces are daily taking a heavier toll of our enemies from all fronts," he said, "and with our own Army and Navy Air Forces, now the greatest in the world." Crowley said.

Air Strength Predicted—It is noted that British and American production and air forces have been posted in the air armadas of Nazi Europe and have substantially weakened Germany's fighter plane

power.



TORPEDO BOMBERS: BRITISH AND AMERICAN:

British Barracuda boulder (left) and the American Avenger. Both have been in service a little more than a year. The Barracuda, newest of the Tiptre, carries its torpedo or bombs as external loads. The Avenger is a torpedo bay. More than 7,800 Avengers have been delivered by Eastern Aircraft Division of General Motors. Photo shows wings folding back.

The partner of the Barracuda is one of the first released by the British Interference Service and shows the unusual tail structure and wing flaps.



Army Post-War Military Policy Virus Outbreak
Secretary of War Stimson, last week, appeared before the first session of the Woodrum Committee on Post-War Military Policy to present his ideas on a single department for the armed services, in which the air force would attain equal status with ground and sea forces. Stimson is seated on the foreground, and to his

right are Brig. Gen. William F. Thompson. Members of the committee, left to right, are Costello, Johnson, McLean, Snyder, Thompson, Vinton, May, Worcester, Woodward, Powers, Mohr, Smith, Cole and Miller. In the background are Committee members Lucas, Hester and Mrs. Betty Fox. Three members of the Committee were not present when pictures were made.

Aviation Plays Dominant Role In Post-War Defense Hearings

Question of unified or separate air forces served as Army witness presents proposal at Woodrum Committee meeting on future military policy

The role of aviation appears to be the chief concern of Congressmen, along with the formulation of post-war military policy. A series of Army witnesses before the Woodrum Committee last week outlined their proposals for a single department of national defense, and extensive questioning centered around the role of the air forces in the reorganization.

There was general agreement on the broad principle of a single department and differences in detail apparently are sharper in discussion than in actuality.

Old Battle Renewed—The old battle between advocates of centralized separate air forces developed, yet even here discussion centered more on details than on principles. Robert O. Lovett, Assistant Secretary of War for Air, and Brig. Gen. H. S. Bassett, Jr., Assistant Chief of the Air Staff, ran into particularly sharp questioning from Naval Affairs Committee Chairman Vinton and Rep. Max, Naval Affairs Committee member and a Marine Corps Reserve aviator colored, on the question of the naval air arm. But both had made clear in their prepared testimony

they were

in favor of the single department. As the President's principal military adviser, they would have the legal authority to report to him direct. Under this plan, the Secretary for the Armed Services would be relegated to a subordinate position charged only with administrative duties, and as adviser to the President and Congress on political and administrative matters.

Lovett and Bassett were questioned at length on their conception of a post-war force organization, in particular on the number of aircraft to be maintained on the principles and has been advocating major steps.

Navy witnesses will appear before the Woodrum Committee soon to present their views

Army, Navy Agree

Secretary of War Stimson told the Woodrum Committee on Post-War Military Policy last week that Secretary of the Navy Knox was in full accord with his idea for a single department for the armed services after this war. Admiral King, Commandant-in-Chief of the United States Fleet and Chief of Naval Operations, also concurred in the proposal with the broad principles as he reported to Knox.

It is known that Admiral Throop, who has been recommending the Navy's primary post-war studies, is in substantial agreement on the principles and has been advancing similar steps.

Navy witnesses will appear before the Woodrum Committee soon to present their views

Amended Vinson Bill May Effect Termination Power Compromise

Revised measure provides authority for dealing with all types of cancellations; wider control for comptroller general.

Contract termination legislation that may form the basis for compromise on the controversy over the role of Comptroller General Lindsay C. Warren in a new before the House.

Originally prepared by the Naval Affairs Committee to set up precedents for the Navy Department in settlement of claims accruing from terminated contracts, the Vinson bill—S.R. 4669—has been amended to provide for termination of all types of war contracts. While it does not parallel the George-Murray bill now before the Senate, it is designed to meet the same general purpose.

► **Miles Power.**—The new provisions for the role of the comptroller general would give him more power than is afforded him in the George-Murray bill, and more closely meet the general ideas of the House membership, which had been expected to back at the provisions in the George-Murray bill giving Warren power only in the event of fraud and then only when fraud is indicated by the records.

The Vinson bill gives the comptroller general a dual function. First, to the extent he deems necessary, to serve as negotiator in settlements to act as arbiter in settlement negotiations. Second, he would investigate settlements by each contracting agency through "selective probe and review" similar to those processes in commercial practice.¹ The comptroller general would be given access to all books and records of contracting agencies and relevant records of contractors, and required to make recommendations for improvement in settlement methods and procedures. All records would have to be kept five years.

► **Responsibility.**—However, the bill provides that contracting agencies operating under the uniform policies and procedures of an interdepartmental committee will have exclusive responsibility for all termination settlements. Once a settlement is made, it cannot be reopened except for fraud. Fiscal officers involved in settlements remain responsible for cancellations

or nonpayment, but not for payments where fraud later is shown. Membership on the interdepartmental committee will consist of the Secretary of War and the Navy, the Secretary of the Treasury, the Attorney General, chairman of the U.S. Maritime Commission, chairman of the board of the Reconstruction Finance Corp., and the comptroller general, or their representatives. They would be required to organize within 30 days of the passage of the act.

► **Latitude.**—The committee also would have the duty of prescribing regulations for the disposition of surplus property. Great latitude is given the committee in this field and observers believe the present machinery would largely remain functioning, since the bill directs agencies to dispose of surplus property through the central agency then functioning for that purpose.

The Vinson bill provides for a Settlement Review Board to be set up within each department concerned, which would have to review settlements of more than

Navy Surplus Out

Arbitrators of the Navy could not be denied surplus property under the terms of the Vinson contract termination bill.

The Navy is the only agency specifically restricted from declaring surplus goods, and the language of the bill requiring designation of what naval units are surplus.

► **Property Removal.**—Property relating to a terminated contract must be removed by the government within 60 days after demand by the contractor, or the contractor may store such property at the risk and expense of the government. Removal requests, however, constitute a waiver of any contract rights to payment of such property from the government.

Where a contractor has claims against more than one contracting agency, such claims may be consolidated in the agency having the largest share and settled as one claim, with other agencies participating.

\$50,000 before the settlement became binding on the government. Approval of bureau chiefs would be required for settlements of more than \$100,000, and the chief of the contracting agency when more than \$100,000 is involved. This applies both to prime and subcontractors and specifically to subcontractors even when the settlement is made by the prime contractor. Contracting agencies may let free negotiations directly with subcontractors, although such an arrangement would be feasible although the contractor's report on the bill said it recognized that in many cases it would be more practical to have the prime contractor handle negotiations with subcontractors. It also pointed out that settlement organizations of prime contractors would be an essential part of the personnel pool required to handle subcontractor negotiations.

► **Payments.**—Incentive payments to the extent of 100 percent of the contract price for completed items are provided. Ninety percent payment exclusive of profit would be permitted on the balance of the contractor's claim, this amount to be determined by the contracting agency on the basis of the claim of the contractor or other data. Additional interim payments could be made when deemed necessary or desirable in the public interest but must be "clearly within" the amount due. Detailed proof of claim is not required for interim payments, which are to be made as quickly as possible without increasing risk of overpayment. Contractors obtaining overpayment would have to pay a penalty of 12 percent.

The contracting agencies also would be permitted to guarantee loans in negotiations, or to participate in such loans.

► **Property Removal.**—Property relating to a terminated contract must be removed by the government within 60 days after demand by the contractor, or the contractor may store such property at the risk and expense of the government. Removal requests, however, constitute a waiver of any contract rights to payment of such property from the government.

Where a contractor has claims against more than one contracting agency, such claims may be consolidated in the agency having the largest share and settled as one claim, with other agencies participating.

Industry Gets 'Go' On Peace Models

Industrial cells of aviation executives in NAWPC meeting WPB announces development of prototypes for post-war program.

The aircraft manufacturing industry, therefore held strictly to the development and production of warplanes, has been given the green light to develop prototypes of goods the industry will produce after the war, whether on-species, wartime machines, automobiles or railroad cars.

Leading aviation executives attending meetings of the National Aircraft Produciton Council in Los Angeles last week were assured by Dr. W. A. Lombard, spokesman for the WPB Aircraft Production Board.

► **Quantity Is Larger Great Problem.**—Quantity of production no longer will be the No. 1 problem of warplane builders and, as has been reported previously by Aviation News, the emphasis from now on will be on perfecting American military strength to meet combat tactical requirements, such as speed, climb, armament and elimination of weak spots revealed in aerial warfare on all fronts.

Dr. Lombard told the industry leaders that "we're at the peak in production numbers. From now on we'll want you to make type-grade performance of the airplanes you build."

► **Plans To Ax?.**—Matsushita—He reiterated against the United States' falling into the warplane production trap that apparently has impeded Germany's air combat strength. He said there is every indication that when Germany reentered its aircraft production strength in 1948, she failed to consider the need for steady development of tactical quality of her planes.

They that now are free to tilt their post-war shapes with models of them that they hope to build and sell throughout the world after the war era apparently can be surprised to observe that a limited number of commercial manufacturers and that "a great deal of prosperity is ahead for your industry when it can make everything under the sun."

The executives found an understanding from Dr. Lombard that WPB will make no attempt to interfere with the course of the "master 26" draft.

OPA Adds Pressure To Ration Air Gas

Increasing complaints from auto owners that private flyers are parking may result in extension of T-3 action pending. Discussion of private and flood-line operations at a meeting of GPA's guidance industry advisory committee last week indicated the role of War Transport Service planes to civilian fliers had brought new pressure for private plane fuel control.

► **Speed Action Near.**—GPA spokesman says the public will not support plans that strictly private flyers are entitled to say more or as much consideration as is accorded auto drivers. Thomas Shadburn, GPA officer in charge of rationing supply rationing, said an effort would be made to avoid damaging any air field business or contract and charter carriers. His indicated the rationing order might be expected in two to three weeks.

National Aviation Trade Association outlined in a release what it believes to be the rationing program which GPA will propose: (1) fixed base operators would get 58 hours of fuel for each new student; (2) holders of pilot certificates would be allowed fuel for two hours, 15 gallons per month to keep their pants active; (3) private owners would get four hours of fuel per month, not allowable if qualified to receive fuel for war emergency flying; (4) owners and operators of aircraft used primarily to give that hire or contract trips essential to the war effort, and monthly claimants would be based on los book records.

► **Class Little Fast Sacking.**—NATA's appeal against rationing was officially drawn and was signed by John B. Wilson. The Association contends that rationing will cause private planes to be stored or disposed of; operators who have been engaged in war training of pilots will lose their remaining civilian business and may have to shut down; closing of the War Training Service program should make more gasoline available, not less, all private airplanes, including those added by sale of WTS planes, will use only one-fifth the fuel WTS was using.

The executives found an understanding from Dr. Lombard that WPB will make no attempt to interfere with the course of the "master 26" draft.



CHUTE TRAINING

One of thousands of student paratroopers who have trained at Fort Benning, Ga., used recently to think about and is concentrating on the spot where he wants to land.

He explained that any division of an aircraft company engaged in prototype development can be considered a "showcase" under the rules of the WTS order.

► **Overloaded.**—He suggested that the full schedule of the order has been overloaded generally and added that it should be reassigned to many aircraft manufacturers. That, he believes, is lacking at the post-war manufacturers of things other than warplanes.

Dr. Lombard outlined the manufacturers, however, that prototype projects must be restricted to the extent that they do not divert quantities of critical labor and materials from essential war production.

► **Set Principles Kept.**—His comments on post-war training, Dr. Lombard said he is convinced that aircraft manufacturing facilities are adaptable to manufacture of a limited number of commercial commodities and that "a great deal of prosperity is ahead for your industry when it can make everything under the sun."

The executives found an understanding from Dr. Lombard that WPB will make no attempt to interfere with the course of the "master 26" draft.

Ownership of Lend-Lease Bases Put Secondary to U. S. Air Rights

American attitude on commercial access to British areas involved in despatch swap reported conveyed to Beaverbrook by Burke at London exploratory talks.

Right of American overseas air operators to use Lend-Lease air bases in post-war commercial operations again was a chief topic for discussion in official aviation quarters last week as more details of the recent Anglo-American air links became available.

The development of an classified, regarding ownership of the bases as of minor importance as long as U. S. bases have access to them. There was an authentic report that Assistant Secretary of State Adolf Berle, Jr., had commented on this date during his London talks with Lord Beaverbrook.

Flag Secondary—The question of what flag flies over the bases, Berle said the British, is of secondary importance to a multifaceted agreement providing free entry to those bases for participating countries.

An apparently significant point, on which no final agreement was reached, is which countries which retain ownership of the bases would require landing privileges in the United States. This question was raised when Australia's Prime Minister John Curtin arrived in Washington for conference with the President, just as details of the London conference were becoming clearer.

Priority in Australia—Curtin said Australia was prepared to grant landing privileges to a reconstituted base, but the obvious implication that Australia would require similar rights in Hawaii for instance. These were refused prior to the war because the United States felt it also might have to permit the Japanese to land in Hawaii.

Curtin took the occasion, at a press conference, to repeat the principle of the recent Canberra accord with New Zealand, and said in response to questions that bases in the Pacific should be subject to international control.

British to Beata Bases—Another aspect of the bases tangential issue was Prime Minister Churchill and fully there was no present intention to relinquish British ownership of the bases acquired

Lafayette Escadrille in World War I after he was rejected by the U. S. Army. After the war, he continued his interest in aviation and frequently flew his own plane from his home in Idaho City to lower Wall Street, where he was associated with Lehman Brothers.

Secretary of Export—He was a director of American Export Airlines, but resigned when he was commissioned in the AAIF shortly after Pearl Harbor. Only recently

he was appointed as a combat pilot,

despite the fact that he was 44 years old.

FEDERAL DIGEST

Rate Raise Refused

At Waco, Tex., Plant

Protests against North American's plan above group scale, NAWL's rate treasury of work's activities in agency.

By MARY PAULINE FERRY

The National War Labor Board rules that company-wide universality of rates in the aircraft industry should not be applied where such uniformity would actually upset local labor markets at the outset of the Los Angeles contract. It was emphasized all over again that the sole aim was to exchange opinions. These experts had agreed that it was a general disposition to tackle air problems at a worldwide basis, despite the many regional problems that will crop up.

These appeared, in confirmation of reports carried here at the time. Berle's departure, a consequence that a new rate convention will be drawn by both American and British, starting with the premise that one nation's commercial planes may fly through the air space of any other nation, with right of technical stop.

Hitchcock Killed

Lieut. Col. Thomas Hitchcock, aviation enthusiast, one of the world's greatest polo players, star in two wars, was killed in a routine flight accident at Salisbury, England, where he was stationed as commander of a P-51 Mustang fighter group in the Ninth Air Force Support Command.

Although supreme care was generally exercised in "rare and unusual" cases involving special consideration, the Board said that

such should not give same blanket for the establishment of rates entirely without regard to the going rates in the labor market area.

National Labor Relations Board trial examiner recommended that Hughes Tool Co. bargain exclusively, on request, with United Steelworkers of America, Loc. 1742 and 2857-CIO, as exclusive representatives of production and maintenance employees, with certain operated industries and exchanges, at the same aircraft plant; safety and shop stewards' organizations will be recognized only in accordance with the union's organization with the Union, and further, that it has been deducting dues on behalf of any labor organization from employees wages except such deductions as are made pursuant to its contract with the union, cause and debit from in many instances interfering with, restraining, or coercing employees in their self-organized rights; and past compensations notices for 60 days.

Tool operator maintained the General Aircraft Corp. case and these three organizations, members in Loc. 1742, in time became the sole bargaining agents for the plant, so that the company's policy of starting negotiations in their respective units, respectively, did not, and will not, affect the plant for 60 days.

NAWL—The National War Labor Board's rate treasury of the General Motors Corp. at Flint and Pontiac plants, Michigan, has been established in the Flint and vicinity plants listed in the GM contract, and the Board has been advised that the rate treasury of the Flint office and several engineers in Flint, Michigan, and several engineers in Detroit, Michigan, and several engineers in the General Motors Contract Office, Toledo, Ohio, will be closed.

The NAWL's Board assessed an additional level-of-indicator rate has been added in the State of Arkansas, effective April 1, 1944, to cover the aircraft industry, and indicated in the current basic rates, which previously had been certified since the rate and rate table were first issued.

The Bureau of Budget's guidance to the Board in the preparation of the rates of aircraft industry bargaining units, which are to be used in the NAWL's rate treasury, was that the rates should be based on the cost of living index, and that products' percentages were modified by the Bureau of Budget's index of prices, for the most part, to reflect the actual cost of living experience, which probably has been modified since the rate and rate table were first issued.

Aviation Clinic—An aviation clinic, organized by the National War Labor Board, will be held at the University of Illinois, Urbana, Illinois, on May 10, 11, and 12, for the purpose of discussing the problems of the aircraft industry.

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Orville Wright Flies Constellation

Named aeronaut and co-inventor of airplane kites, consists of craft on part of Washington Day trip.

Orville Wright, co-inventor of the airplane and first man to fly it, has taken at the controls and occupied the co-pilot's seat during the greater part of a 50-mile round trip flight from Lockheed Constellation at Wright Field, Dayton, last Wednesday.

He was more than 40 years old

when his first flight at Kitty Hawk, Dec. 17, 1903, and the second time he had been aboard a plane, even as a passenger, in the last 20 years. "As an AVIATOR NAWL representative in the party with him on the flight, Mr. Wright remarked after the flight landed, "If you say I flew the plane, use some question marks or punctuation points so people will know you aren't serious. The plane flew itself."

Takes Over By Army—The long-drawn-out intercessions, now officially the Army's C-69, had ended at the Material Command and Quarantine Board, located in a former lumber barn, after a lengthy move from Washington, where it had been turned over to the Army Air Forces by TWA and Lockheed representatives.

After a brief checkup on the C-69 at Wright Field, it will be

put into service test flying at the Dayton Army Air Field, Vandale, Ohio.

Committee to Meet

Plans for the second annual olive of domestic aviation planning at Oklahoma City next November will be made in Washington May 8 and 9 where the clinic's executive committee meets. The session will conclude with a meeting of directors of the National Aerospace Association May 8.

The clinic itself is to be held Nov. 15 through Nov. 28. Stamford Acker, Birmingham airport manager, again will be clinic director.

Draper Roads Committee—Members of the executive committee, named jointly by NAA and Governor Kerr of Oklahoma, include Stanley Draper, managing director of the Oklahoma City Chamber of Commerce, chairman; G. M. Moser of New York, American Airlines vice-president, program chairman; Harry Bruns, New York, public relations chairman; Kern Dodge, Philadelphia, resolutions chairman; Cal Jack Jeant, Higgins Aircraft, New Orleans, credentials chairman; Glenn Eastham, vice-chairman, Los Angeles; William P. Redding, NAA treasurer at Washington, on credentials; Mayor Robert McFarland, Oklahoma City, and Glenn C. Kuley, president of the Oklahoma City Chamber, co-chairman on local arrangements; W. R. Bryant, NAA president; Gil Heldt Wilson, NAA past president; Lee Webb Swanson, NAA manager; Governor Kerr; Paul Hensel, president of the Oklahoma City NAA chapter, and Jack Hall, assistant secretary of the Oklahoma City Chamber, class secretary. Other names are to be added later.

Gwynn Named P & W General Manager

William P. Gwynn has been named general manager of Pratt & Whitney Division of United Aircraft Corp., promoted from the acting general manager to which he was named last November when H. Standish Warner became president of United.

Gwynn, who is 36, joined the company 15 years ago and after serving in the factory was named assistant to the service manager. Six Years On Coast—He spent six years at West Coast representative of the company and in 1939 returned to the home office at East Hartford as assistant sales manager.

In 1942, Gwynn was appointed assistant general manager of Pratt & Whitney and last November was elevated to acting general manager. Gwynn was named by the Board of Directors at its annual meeting last week.

Mich. Board Grants 1st 'Copter License

The Michigan Board of Aeronautics has granted the Aeromarine Products Co., of Detroit the first helicopter-type license in Michigan. The name of the executive committee, named jointly by NAA and Governor Kerr of Oklahoma, include Stanley Draper, managing director of the Oklahoma City Chamber of Commerce, chairman; G. M. Moser of New York, American Airlines vice-president, program chairman; Harry Bruns, New York, public relations chairman; Kern Dodge, Philadelphia, resolutions chairman; Cal Jack Jeant, Higgins Aircraft, New Orleans, credentials chairman; Glenn Eastham, vice-chairman, Los Angeles; William P. Redding, NAA treasurer at Washington, on credentials; Mayor Robert McFarland, Oklahoma City, and Glenn C. Kuley, president of the Oklahoma City Chamber, co-chairman on local arrangements; W. R. Bryant, NAA president; Gil Heldt Wilson, NAA past president; Lee Webb Swanson, NAA manager; Governor Kerr; Paul Hensel, president of the Oklahoma City NAA chapter, and Jack Hall, assistant secretary of the Oklahoma City Chamber, class secretary. Other names are to be added later.

PRIVATE FLYING

Manufacturers, Distributors Group Organizing Post-War Program

More than 40 parts, supplies and equipment firms comprise expanding trade association preparing plans to meet problems of war and peace.

By BEAINE STUBBLEFIELD

A merchandising committee of Aviation Distributors and Manufacturers Association, appointed by ADMA President Ray Ferrelly, will "study all phases of the merchandising of aviation parts, supplies and equipment." George A. Ferrelly, association secretary, said the committee is preparing for the education of retailers in effective contact with users.

The committee's progress, and the set-up and objectives of ADMA, were explained during a conference at Philadelphia group headquarters last week.

Organized Year Ago—ADMA, organized early last year, has a Distributors Division and a Manufacturers Division. At present, it has more than 40 members, officials said, and they estimate about 160 firms eventually will join the organization. Members and prospective members make and sell gen-

eral aviation goods such as batteries, tires, hose, paint, aircraft plugs, propellers, testing equipment, and so on. Engines are not included, but engine parts may be, in the future.

Makers and sellers of airplanes, and the parts made specifically for those planes, are not included in ADMA. Trade group of the light plane builders is the Personal Airplane Department of the Association Chamber of Commerce.

Ferrelly to Aid in Policy Formulation—ADMA has retained George A. Ferrelly, specialist in trade and industrial practices, to assist in the formulation of policy, and an attorney-specialist to conduct the organization's business of its development. Mr. Arch S. Smith, Philadelphia 8, Pa., Vice-president are C. B. Hanrahan, B. G. Corp., New York, and W. F. Scott, Jr., Supply Division, Inc., Robertson, Mo.

Sixty producers and distributors have proposed measures to keep excessive inflation out of the aviation field. Officials of ADMA said there is no legitimate reason to effect such restriction. They added that, after surveying the prospects, the auto people usually find aircraft potential business too small to interest them.

Trade Practices—Several leaders in both divisions of ADMA have given expert advice on trade practices in addresses before the membership. Among them are T. G. Tyree, W. F. Scott; L. O. Moore, Dwight P. Joyce, R. J. Montgomery, General Motors; James A. Baldwin, Roths Corp. of America; L. E. Neel, editor of Aviation Magazine; and Mr. Ferrelly.

The Merchandising Committee has a 14-point study agenda, including potential market; standardization of parts for minimum stock and maximum interchangeability; standardization of definitions and nomenclature; returned goods policies; inventory systems.

Standardization—Asked if they

No rules and regulations on trade practices will be laid down by the ADMA board of directors. Its policy is to give information and advice, and to promote friendly cooperation between manufacturers and distributors and with their retailers and final users.

Scope of Work—ADMA headquarters will investigate matters of interest to its members, cooperate with the Federal Trade Commission, make cost studies, try to improve accounting systems, study advice on disposition of government-owned equipment and the termination of war contracts, and on wage incentive plans and pension systems. It will give attention to interchange of credit and simplification of laws, has issued up to the present 40 informative bulletins.

Secretary Ferrelly emphasizes the Association's intention to observe the provisions of the antitrust laws. He said that in 85 years of service to business associations, his firm has seen no permanent benefit accomplished through circumvention of these laws.

Worl's Fair on Distribution—"We will not establish any list of so-called 'legitimate' wholesale distributors," Mr. Ferrelly said. Under the law, he explained, the Association can damage the advantages of different types of selling policies, such as selective distribution, but it does not appear that it will accomplish in restraining the trade," he argued.

Some producers and distributors have proposed measures to keep excessive inflation out of the aviation field. Officials of ADMA said there is no legitimate reason to effect such restriction. They added that, after surveying the prospects, the auto people usually find aircraft potential business too small to interest them.

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Standardization—Asked if they



CLAMPS PROTECT ALERONS

Small plane owners may save eleven repair bills with protection clamps such as those invented by Ralph Berlin, maintenance man at Thisted Field II, Southwest Atlanta's primary training school near Phoenix, Ariz. From scrap materials, he devised a protective bar that covers the airplane's trailing edge.



WE PUT OUR HEADS IN THE CLOUDS AND MADE RAINDROPS TO ORDER

Where do long hairpins fall on a wing in flight? How do different speeds, wing sections, and raindrop sizes affect that answer? That's what we wanted to find out. And this problem led to some very interesting raindrop research, conducted with the help of David Gaggenau, Shirley Testane, Akron, Ohio.

First we plotted loads from the clouds—wick them apart—against blade load or raindrop size. Then we concentrated wing section models, fixed one of them on a machine so it could be whirled at controllable

speeds. Next we cemented saturated paper onto the leading edge. Then we started things whirling.

Raindrops of one specific size were released at a fixed point on the roadster. By checking the saturated paper, the raindrops were counted and their position plotted in relation to the leading edge. We did this again and again . . . with different speeds, raindrop sizes, wing angles, and artificial surfaces.

The results are graphs that tell us the story of where freezing rain hits a wing, so that now we know how

far back from the leading edge
the front should extend for adequate protection.

The B. F. Goodrich Co., Akron,
Ohio, Akron, Ohio

Skyway or Highway

B.F. Goodrich

FIRST IN RUBBER

MAKERS OF MORE THAN 80 RUBBER AND SYNTHETIC RUBBER AVIATION PRODUCTS

THE AIR WAR

COMMENTARY

Mighty Allied Aerial Arsenal Faces Biggest Test in Invasion Job

Terrific air battles inevitable, with planes forced to multiple roles of knocking out Luftwaffe, paralyzing communications and blasting and strafing enemy installations and troops.

During the invasion of Europe, our Tactical Air Force will operate in three distinct phases. The first job is to knock out enemy air power. The Strategic Air Forces already have made considerable progress in that by destroying thousands of Luftwaffe fighters in the air and on the ground, and potential thousands which will see out of the productive lines on account of the disabling effects of vital aircraft factories.

However, no matter how well this part of the job is done, ter-

rible air battles are practically inevitable and the invasion starts, as General Eisenhower himself has recently indicated. Allied fighters must head off and destroy the swarms of improved enemy bombers and fighters now in reserve which will concentrate on the landing forces. Allied medium and light bombers and fighter-bombers must strike at enemy bomber bases to knock out aircraft and facilities. Here, too, a start has been made already and the line has been moved back, but in the nature of

'Tarmac Duty'

The Navy has introduced a new term for ground handlers at airports and it is appropriate that it should be used before sound clearances go into flight prep courses as "tarmac duty."

In addition to utilizing young men before pre-flight courses were available, the new duty gives the potential pilots personal experience with handling aircraft on the ground at various air stations on the continent, and aided in familiarizing them with Navy aircraft types.

the case it cannot all be done in advance.

Holding the Battlefield—The next task is to smash enemy supply lines and concentrations. During the last two weeks of April tons of thousands of tons of bombs, including a record 5,000-ton assistance by the RAF, have been dropped on rail yards, terminals, locomotive repair shops, canal locks and bridges, to disrupt communications as far as possible before the big day. However, there will be a vast amount of unfinished business along this line which cannot be done until the time arrives. Similarly as regards the smashing of defense installations. Since Christmas week the "invasion coast" in the Pas de Calais area has taken a most terrific pounding, and these installations have almost certainly been badly smashed up and moved farther inland. But here again new construction goes on apace, and it is more than probable that all types of objectives, including the Fens and Flanders, Loire and Halles, as well as the meadows and lights, will have to be thrown into the dog for a time when D-Day arrives.

Allies' Best Secretive Air—As the fighting fleet proceeds, fast attack bombers and fighter-bombers will be used directly against enemy troops and ground objectives. Airborne troops in transports and gliders and paratroopers will land behind the enemy lines and perform dangerous and highly specialized jobs with clock-like precision. Gas replacements, tank concentrations, supply and assassination damage will have to be kept secret.

Low-flying attack planes will



WANTED: 4,000 MILE AIRLINE IN A HURRY

On June 26, 1948, a 4-masted Vought-Sikorsky flying boat took off from Manhasset Bay headed for Foynes, Ireland, nonstop. It was the first of ten trips of American Export Airlines. Behind that historic take-off were years of planning and experimental flights. Now the war was on, full blast. Our government had urgent work for the new airline.

Invasive pilot training was organized. A Link Trainer was installed...then another. In the Link, pilots carefully rehearsed approaches to faraway ports they had never seen. Among them was Bill Eshier, veteran of a million miles of ocean flying.

By the end of 1948-49 thirty months after that first payload flight—American Export Airlines was operating a fleet of big flying boats in regular service to Europe...Africa...South America...11,574 route miles. Three hundred forty-three Atlantic crossings had been made.

That is the story of American Export Airlines...a story of American enterprise, know-how; the will to win! Link is very proud of its part in that story.

LINK AVIATION DEVICES, INC.

Binghamton, New York

LINK MANUFACTURING COMPANY, LTD., GALTWOOD, ONTARIO



BATTERED HELLCAT COMES HOME:

The Hellcat of the "Lucky 12" squadron made it back to its carrier after a direct hit by a three-inch anti-aircraft shell which knocked out its radio and damaged its arresting gear. Despite the damage, suffered at Kinsale, the pilot got back for a crash landing, shooting down two Germans on the way.



drop light bombs and "parabangs," carry out skip-bombing attacks, and heavily strike their objectives with machine gun and cannon fire. Fast reconnaissance ships will stalk over enemy territory and bring back the indispensable photo intelligence required in modern operations. And, during all this time, fighters must maintain practical control of the air. Without this, the battle will not be won.

Fighters—all this sounds like a big order for tactical answer. Do we have the staff, and enough of it? First, all we have are Technical Air Forces, RAF and AAC, with the fleet available to defend against aerial aggression. [See ANTISUB WING, Apr. 17, page 18 for our latest chart.] Practically the entire North Africa front is there. Blameberg, Tridder, Ropax, Dadiut, Cunningham, Brewster, Montgomery, the leaders who hammered out the air-ground pattern of victory a year ago. The same aircraft are available as then, in most cases in greatly improved versions, and in sufficient quantities, plus some powerful new models. A few examples follow:

Fighters and Fighter-Bombers—Improved American models in this class include the latest Lightning, which can carry twice the bomb load as last year, and as an escort fighter has double the range. The Merlin-powered Mustang is a great improvement over the Allison-powered A-36, used with such success in the invasions of Italy and Sicily. The Thunderbolt was not used in the Tunisian campaign, but since then has been the backbone of the British-based fighter force. The very heavy Mosquito (weight 29,000), superb performance at altitude, and amazing ability to absorb punishment make it a tough customer. New series with water-injection and variable-pitch propellers have a greatly improved rate of climb. All of these 400- mph fighters double as brass as effective fighter-bombers, with fighter protection.

Their British stablemates are not less effective. In the Thunderbolt weight class is the Hawker Typhoon, with 1,800 hp Napier Sabre engine and four 20-mm cannons, a highly effective low and medium altitude fighter and fighter-bomber. The latest somewhat full version belongs to RAF and AAC; in Russia with great appreciation by the Red Air Force; and in New Guinea as one of the successful gunners pug in漫漫

Navy Pilot Costs

Despite the discontinuation of all War Training Service school contracts by the Navy Department effective by the end of the fiscal year, not less than 100,000 men will be turned over the aircraft previously appropriated for such preliminary training. Naval officers inform the House Appropriations Committee. Reason given is the "increased rates for tuition" which would result.

During the next fiscal year beginning July 1 an average of 6,000 primary training students (30 month course) will be enrolled at about 10 bases instead of 6,000 during the current year, with the flight and per hour training fees ranging from \$8 to \$20. Although flight hours per month per student will rise from 30 to 44.

A total of approximately 18,000 students will enter Naval intermediate training next fiscal year, again at about 20,000 total cost. Flight hours per month per month will rise to 61 from the present 36.4, while cost per flight hour dropped Jan. 1 from \$27.00 to \$20.77. Graduates are estimated in 28-29 against the current year's expectation of 30,430.

NATIONALS

Gen. Vandenburg Succeeds Butler

sustaining medium and high altitude fighters. The newly announced North Star, fitted with Rolls-Royce Griffon 1,600- mph engine and with clipped wings is especially adapted as a low-level fighter and fighter-bomber. These British aircrafts are also in the 400- mph class.

Middle and Light Bombers—Since last August the Martin Marauder, now operating with the Ninth Air Force, has established itself as the best long-distance bomber, operating from low-moderate altitude (10,000 to 12,000 feet), with fighter escort largely unnecessary. The new model with twelve 50 caliber machine guns packs a deadly punch. A recent addition to the Ninth Air Force striking power is the new model of the Douglas B-17, one of this war's most popular and versatile light bombers, having been used in England since 1941 as the British day-bomber and Home night-fighter; in North Africa by RAF and AAC; in Russia with great appreciation by the Red Air Force; and in New Guinea as one of the

successful gunners pug in漫漫

Hale Gets New Post
in Pacific Theater

Major Gen. Willis E. Hale, commanding general of the 7th Army Air Force in the Central Pacific, has been given command of the shore-based air forces in the forward areas of that theater. The post has been created to coordinate operations and logistic support of all shore-based Army, Navy and Marine combat aviation. Admiral Chester W. Nimitz announced

AVIATION NEWS • May 1, 1944

Caravans of Commerce on FIRESTONE WINGS



Across the wide expanse of the seven seas, flying on wings built by Firestone, soar the vanguards of a gigantic fleet of planes that are as vital to victory as bombers and fighters. These gigantic Curtiss "Commandos", carrying troops, paratroops, air-borne infantry, jeeps, tanks, guns and supplies, are the forerunners of a new and swifter system of peace-time transportation

that will reach to the most remote corners of the world.

Wings for the "Commandos" are only part of a long list of Firestone contributions to the Aircraft Industry. And whether your problem is one of development, design or volume production — whether your requirements are made of rubber, metal or plastic — a Firestone engineering representative is available on request.

Listen to the Voice of Firestone with Richard Crook and the Phoenix Orchestra, under the direction of Donald Badde, Monday evenings, over N. E. C.

Firestone
AIRCRAFT COMPANY



CLEARING the South Pacific smile of Tokyo's pillar leaders calls for second vigilance. No sooner must be spoken fast. Where are they? How many are there? What are they up to? The only way to get the answers is from the sea.

On a June day last year a flight of eleven Cessna amphibious aircraft of regional fame from San Francisco took off from the ocean, covering vast areas of sea and far points abroad for one of the why Japs can be so mysterious. But it's a job that calls for constant alertness. For any thing can happen...and far usually does—when least expected.

Major Roy L. Stevens, U. S. M. C., and First Lt. W. H. Stess, U. S. M. C., were in the flight. Major Stevens, originally a clouds layer, there, 10,000 feet being over 30 to 35 zero, was looking for possible. The right place for the Japs. The Japs, caught on the open, stuck into the entry of a cloud bank. One looking Marine saw plenty of smoke and took off his M-100 goggles to prove the place. For the Japs had started disappearing out.

By now, the uneventful weather that pro-

voked the Japs with never had closed all landing fields in the known area. Vines and Stess became separated from the other planes in the flight. Stess' plane resting precariously low against jagged Stagé Vines was watched from a distance by the others. His fighter plane dove to the water off a small island. Stess got ashore before it sank and remained there safely in his rubber boat.

Vines had reached the base of his companion's flight. Swiftly in the ocean came an Edsopped Navy Kingfisher, one of the famed "sway ships" of the air, piloted by Lt. (j.g.) W. C. Adams, U. S. N. R. Slightly, Adams found his ship submerged, which caused him to drop his landing gear. By this time a radio check had been below cockpit. Read report: "All present."

Engaged Edsop float permitting Navy cockpit plane to land, take off again, and once winter here beat winging chapter after chapter in the heroic story of sealing off effect which has enabled scores of Naval Aviators from death after they had been forced down or shot down during flight operations.

EDO FLOAT GEAR

SERVING THE UNITED NATIONS

EDO AIRCRAFT CORPORATION
415 SECOND STREET
CINCINNATI 2, OHIO



The preceding part Vines, with no other means of reaching the rescue plane, rowed through the turbulent sea until he located the Edsop. By this time a radio check had been below cockpit. Read report: "All present."

Engaged Edsop float permitting Navy cockpit plane to land, take off again, and once winter here beat winging chapter after chapter in the heroic story of sealing off effect which has enabled scores of Naval Aviators from death after they had been forced down or shot down during flight operations.



AVIATION NEWS • May 1, 1948

PERSONNEL

Howard E. Hartman has joined Chance-Varig Air Corp as executive assistant. He has previously served 15 years with the Pratt & Whitney Aircraft Co. and has been manager of United Herman's assistant general manager of the Chance-Vari-

Corp in South Meriden.

Harold E. Hensler has been appointed chief industrial engineer of the Metal Division of the Standard Voltmeter Aircraft Corp. He formerly was with the electrical engineering department at San Diego and has been on the engineering staff since 1941.

Max Medes has joined TACA Airlines Agency, Inc., as its new representative for the New York office. He was named manager of the export department of the corporation and has relinquished his post at Chance-Vari. Hart joined Chance-Vari in 1941 and has held several senior management positions since that time. Last winter he made a two-month tour of South and Central America studying the aircraft situation in the various countries.

E. E. Hensler has been appointed chief industrial engineer of the Metal Division of the Standard Voltmeter Aircraft Corp. He formerly was with the electrical engineering department at San Diego and has been on the engineering staff since 1941.

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Max Medes has been awarded to five members of a Northeast Airlines crew for making a perilous rescue mission in the Arctic regions while flying for the Air Transport Command. Those decorated were Capt. Alvin V. R. Ward, Capt. Francis B. Chidlow, Joseph Smith, Lester F. Hopkins, and William A. Pasach. The

JAMES E. BAUD, former deputy chief of the Army Staff Branch of the War Personnel Board, has been named production manager of the Toledo Roller Bearing Co., Toledo, Ohio. Before joining the government, he was production manager of the Steel and Tube Division of Toledo

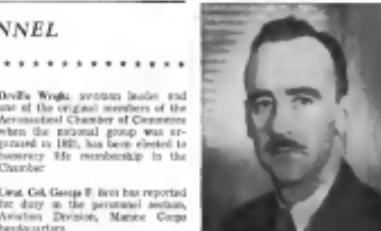
P. E. Pasach has been named traffic representative of American Airlines at Toronto. For the past two years he has been serving with the R.A.F. Transport Command. Previously Pasach was with Colonial Airways, Ltd., Montreal. He joined American in 1941. Mr. Murray Williams, traffic manager for American at Montreal, having transferred from the Toronto office, where he has been



Priestman

Statton

traffic representative since 1941. He formerly was manager of Canadian Colonial Airways, Ltd.



Barr

Joseph M. Bay, assistant general manager of the Chance-Vari Aircraft Division of United Aircraft Corp, has been named manager of the export department of the corporation and has relinquished his post at Chance-Vari. Barr joined Chance-Vari in 1941 and has held several senior management positions since that time. Last winter he made a two-month tour of South and Central America studying the aircraft situation in the various countries.



VOUGHT OFFICIALS HOST TO NAVY PILOT:

From left: Captain John T. Blackburn (retired), Commanding Officer of the Navy Carrier Squadron, the "Jolly Roger"; Captain Charles Vought among Stratford, Conn., he toured the plant with Capt. John T. Gandy, chief experimental test pilot; Rev. B. Howell, general manager and Captain A. Bullard, Jr., chief of test flight. Blackburn's outfit CARRERS to shoot down 356 Jap planes in 79 dogfights in the Southeast Pacific.

crew made a 10,000-mile Arctic flight around the magnetic pole to bring a U.S. Army Air Forces weather observer and to carry badly needed supplies to distant outposts.

James F. Mitchell has resigned as director of personnel of the Commercial Personnel Division and will return to Western Electric Co. He is being replaced by W. A. Hughes, general manager of Indiana Bell Telephone Co. Mitchell before joining APF, assisted in organizing the Training-Warren-Industry program.

Ed White has been promoted to the post of assistant production manager of the production control division at Lockheed Aircraft Corp.

James H. Marks has been appointed executive vice-president of Packard



LOCKHEED CONSULTANT:

A. M. Magorien, nationally prominent naval aviator, engineer, reporter and special consultant to Lockheed Aircraft Corp., is pictured at the left for battle areas under special arrangement for the War Department. Lockheed is publishing one bulletin on their search-and-rescue program, guided by Magorien, who expects to return to the battery on completion of his military assignment.



Marks

John C. Belote, brothers of Robin Roger aircraft engines. He was formerly in charge of Packard's war production contracts and recently was chosen chairman of the contract termination committee for the Automobile Council in War Production.

Richard G. King has been appointed assistant to the president of Taylorcraft Aviation Corp., following cancellation of his contract, which was rejected by Eastern Air Lines as incomplete. King was formerly with Knudsen-Wallace Co., Chicago, and has been engaged in that company's sub-contract division, principally at the DeKalb, Ill., plant, manufacturing on Navy aircraft contract.



WINS IDEA AWARD:

Walters Daltz, supervisor of United Air Lines' Chicago maintenance center, was presented with a \$500 War Bond by W. A. Peterson, supervisor, at the result of a competition sponsored by United's Chicago Maintenance Conference. The organization, of a confidential military nature, numbers 20,000 man-hours of work annually.

R. C. Wright has been appointed assistant treasurer of United Air Lines. Until his latest promotion he was assistant to the director of financial departments and has been with United and its predecessor companies since 1945. Wright is a veteran of air transportation in this country.

S. V. Hall has been assigned to full-time management of United Air Lines' military operations for the Army Air Transport Command areas of Alaska and to Alaska, Montana, S. C. Bishop will serve as regional manager of western operations for United. Hall will be headquartered at San Francisco; Hall, regional vice-president of United, has devoted his attention to supervision of both the company's civil and military operations of Denver and its military operation on the Pacific Northwest has been his assignment.



ELECTED TO RAS:

Dr. Stephen J. Zand, director of the Tora Memorial High Altitude Laboratory of Sperry Gyroscope Co., at Great Neck, L. I., has been elected a Fellow of the Royal Astronomical Society. He is the nineteenth American to be honored by the Society, the oldest astronomical association in the world. Before joining Sperry in 1932, Dr. Zand was with Curtiss-Wright Corp., Buffalo, and Fred Motor Co. (Aero Gyroplane). Dr. Zand is a Wright Brothers medalist, a fellow of the Institute of Aerospace Sciences and a former vice-president of the Society of Automotive Engineers.



MOVES 7 TONS OF CARGO 215 miles an hour

Here is an airplane designed and engineered solely for transport service. The size of its doors, the capacity of its hold, its ability to fly loads of varying weight and bulk all point to freight-carrying efficiency.

Today, under war's abnormal flight conditions, it has proved its dependability and economy.

This is the Curtiss Commando's posterior prowess! On moderate length runs, it will move 7 tons of cargo

215 miles an hour—at an estimated shipper's cost that is only slightly more than fastest surface transportation rates—and way below existing air express charges.

Once Victory relatives the Commando from its noteworthy contribution to the movement and supply of our forces, its destiny as a cargo and passenger transport is assured. LOOK TO THE SKY, AMERICA! Curtiss-Wright Corporation, Airplane Division, Buffalo, Colorado, St. Louis, Louisville





Last 10 seconds of a 1000 mile flight

No time in the flight of a long transport plane is more important than the seconds just before landing.

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AIRCRAFT PRODUCTION

World Airworthiness Standards Discussed at St. Louis, London Talks

Warner of CAB stresses need for international agreement from standpoint of private plane manufacture as well as safety in air commerce.

By SCOTT HERSEY

Problems of international airworthiness requirements are receiving increasing attention in the aviation industry which generally sees decided advantages in the setting up of standards, although viewpoints on the cause to be followed are widely varied.

The question came up for considerable discussion at the recent meeting of the Airworthiness Requirements Committee of the Aerospace Chamber of Commerce in St. Louis and the subject also was discussed in the technical session of the London exploratory talks.

Standards — The advantages of international agreement are obvious from the safety viewpoint, but the trend of thinking in the industry is also on the importance of standards which would be adopted by one or more countries to cover countries and, in addition, to widen the market from the industry standpoint of aircraft engines, prime materials and accessories, regardless of the country of their manufacture. The importance of such standards from a manufacturer's viewpoint should not be overlooked and the establishment of certain standards and categories would eliminate the possibility of undercutting with inferior equipment.

Such experts as Edward P. Warner, vice-chairman of the Civil Aeronautics Board, feel that problems of international airworthiness requirements had received too little attention in the past and he is hopeful that further discussions among aircraft manufacturers will be undertaken with a full development of all viewpoints on the matter.

Opinions Differ — Warner discussed his own views on the ques-

tions at the Chamber's Airworthiness Requirements meeting in St. Louis, which was attended by top engineers of 25 leading aircraft manufacturers.

It is conceded that there is considerable difference of opinion among aircraft industry leaders on the question of international agreements regarding airworthiness requirements, some favoring the view that there should be no attempt at international agreement whatsoever.

This view is based on the opinion that American manufacturers

Post-War Jobs

A census of some 60,000 aircraft workers in the Wichita, Kan., area, designed to ascertain the nature of the city's employment problem during the immediate post-war period, disclosed that about 30 percent of these questioned want to remain in the city or shop work after the war.

Seventy percent of those

questioned want to go into business for themselves and the rest want other kinds of employment or plan to return to industry especially agriculture and the service fields.

Those who want to remain in factory work:

40 percent want wages and at these, 30 percent said they would like to continue in factory work after the war. Thirty percent want to return to their homes. Thirty percent want to join the rest have mentioned other plans.

Forty-six percent of those questioned want to return to Wichita after the war and 31 percent said they would stay in the city for the duration.

can produce superior airplanes and that these planes in some other countries might compete against our domestic industry.

Agreements — Others feel that there should be agreement to as great a degree as possible, with no attempt to make agreements binding. Under this proposal, each country would maintain its own set of requirements, but an international reviewing board might be established to study differences between the various requirements and make recommendations for a closer agreement. This proposal, in the opinion of Warner and others, appears most feasible at the moment.

Still another possibility would be complete international agreement which would require a treaty of some sort which would give to a permanent international airworthiness committee power to adopt complete and final authority to make decisions involving the regulations. A modification of this plan has been suggested as which decisions of the international board would be subject to ratification by the individual countries.

British Optimistic — The British are said to be quite optimistic about the feasibility of reaching international agreement in airworthiness requirements, but this optimism is not fully shared by Warner, in view of the difficulty and time delay that undoubtedly would be involved in ironing out differences of the participants.

Warner told the Chamber's Airworthiness Requirements Committee that his doubts grew in large part out of the present practice of consulting the industry and other interested parties fully and separately before any change was made in American airworthiness requirements.

Europe Binding Accord — He said he believed full international standardization was a desirable objective, but that it could be attained only if a landed group of representatives of each nation were authorized to go into conference and arrive at decisions which would be binding on all parties. Warner expressed doubt that such a proposal would receive the unanimous approval of American industry and suggested that industry views on the matter be fully developed.

Warner also suggested that industry as soon as possible take a course to be taken with respect to international agreements for the

mutual recognition of certificates of airworthiness.

► **Reciprocal Certificates**—It complete agreement of airworthiness representatives were attained, the various nations obviously would accept one another's certificates and aircraft could travel freely from one country to another.

On the other hand, as seemed to Wright Field, likely there continue to be differences among the national standards, the various nations might either agree to accept standards of the other as most adequate to the extent that private aircraft certified in one country by one nation, under its own standards, would automatically be accepted as eligible for certification in other countries concerned, or it might be required that any aircraft so exported should be checked for its ability to meet the standards of the country into which it was to be shipped or flown.

► **Objections**—He pointed out that, although there would be obvious objections to allowing the sale in the United States of aircraft which did not fully comply with our airworthiness requirements, these objections might be offset by the advantages of allowing a reasonable freedom of international trade in private aircraft.

Wright argued that the industry give these pragmatic considerations and make them views known.

Naval Flyers Given Liberator Training

Former primary base at Blanchard, Kan., to be used for instruction.

Training of Naval aviators and air crews in multi-place, multi-engine Liberators was begun last week at the Naval Air Station, Hutchinson, Kas.

The station was used formerly for primary training but, due to the expansion of the Navy's programs for land-based Liberators, it was necessary to provide complete facilities for an all-inclusive training program of the pilots and air crews who comprise the combat teams.

► **Crew Training**—Naval aviators go to Hartsfield for combat training after completing the Navy course in multi-flight, primary flight course and intermediate flight training. Captain William C. King is com-

manding officer of the station and the training officer is Comdr. Douglas L. Mosher. Prior to his present tour of active duty in the Navy, he was a senior pilot of Transoceanic and Western Air Lines and had a leading role in that company's four-engine Stratoliner program.

Materiel Command Revises Inspections

Gen. Brashears emphasizes common search for safety devices in plane design and construction

By ALEXANDER MCGURELY

Reorganization of the inspection division of AAF Materiel Command, which will affect inspection requirements and procedures on every war plane producing aviation war material in the country, has been announced at Materiel Command headquarters, Wright Field.

Major Gen. Charles E. Brashears, commanding general, said the reorganization was a part of the command's continuing policy to provide planes and equipment with the highest possible margin of safety to the American aviator who uses them.

► **Safety Factors Stress**—"Life may be cheap in the Japanese," he said, "but so far safety of our men is of primary importance. Materiel Command experts are constantly striving to increase safety factors of all Air Force equipment from procurement to superpower. We want to get our airmen to tail-

get areas as quickly and efficiently as possible but we also want to get them back. A plane can be built within a few days now—it takes 30 years to grow a pilot or gunner."

Cooperating with the organization, General Brashears announced appointment of Col. Bryant L. Bowles, of New Orleans, as inspection division chief.

► **Authority Certified**—Major purpose of the reorganization, if explained, has been to define more clearly the authority of inspectors in the field in an effort to eliminate overlapping responsibilities which may tend to cause confusion.

With this in mind, many long outstanding directives and specifications have been revised and rewritten. Materials review procedures have been reorganized and clarified, and allowable limits have been more precisely defined.

► **Coordination**—Stresses the revisions of procedure, the reorganization seeks to maintain a closer coordination between division headquarters at Wright Field, and the thousands of government and contractor inspection representatives in various warplants, for a clearer understanding of over-all inspection policies by the men in the field.

To supervise the reorganization, the Materiel Command called in Brig. Gen. Ray G. Harms, supervisor of the Midwestern Procurement District at Wichita, and a recognized authority on procurement policies and inspection work. Beginning in February, General Harms has been working to reorganize inspection periods and establish closer cooperation between headquarters and field inspectors. Now the reorganization has been completed and General Harms has returned to his Wichita assignment, leaving Colonel Bowles to take charge of the reorganized division.

► **West Point Graduate**—A graduate of West Point in 1928, Colonel Bowles has served at Wheeler Field, Powell Brooks and Kelly Field in Texas, Salt Lake Field, Mo., and Bartlesville, Okla., before coming to Wright Field in 1938, to attend the Air Corps Engineering school.

In 1939, he and another pilot set a world's speed record for amphibian planes. He has been assigned to production division work in the command and is probably best known for his direction of the modification center system when it was first set up early in the war.



Inspector Chief Col. Bryant L. Bowles, (see story), Inspector Division, AAF Materiel Command, named commandant with the reorganization of the division.

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HARDENED AND GROUNDED PARTS

Every McQuay-Norris part in modern airplane motors is backed by 34 years of experience and progress in precision manufacture. Today the world's largest makers of aircraft motors are availing themselves of our broad background of metallurgical development, heat treating, clinical research, and engineering design. Your inquiries are invited.

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- Camshaft Thrust Plates
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- Cylinder Head Disc Nuts
- Head and Ground Parts

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EQUIPMENT FOR MAINTENANCE OF AIRCRAFT

- Permit for Oxygen
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PRECISION WORKERS IN IRON, STEEL, ALUMINUM, BRONZE, MAGNESIUM

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WHEN ALUMINUM OCCUPIES
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SAVING = $\frac{2}{3}X$

Let X represent the weight of conventional heavy coppered-copper and coolant radiators. Then $\frac{2}{3}X$ is the precious savings in weight offered in each of two famous fighter planes by the use of Clifford Featherweight aluminum alloy copper and coolant radiators. One plane is actually 300 lbs lighter. In the other, the saving there is a total potential weight saving of 300 lbs.

Such vital savings over weight are made

possible by Clifford's history-making discovery of the long-sought method of bringing aluminum in very thin sections—a discovery that permits complete interchangeability—same size and shape—of heavy weight copper and Featherweight aluminum alloy in our craft oil radiators and coolant radiators.

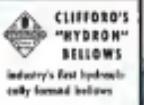
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Save $\frac{2}{3}X$ The Weight
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CLIFFORD'S
"HYDRON"
BELLows

Industry's first hydraulically
controlled bellows

Boeing Dedicates Air Laboratory With 700-mph Wind Tunnel

New unit, fastest in U. S. with sections more than two feet in diameter, to be testing ground for airplanes of tomorrow.

A 40-foot aeronautical "test tube" capable of generating supersonic airstreams approaching the speed of sound, in which will be born many airplanes of the future, has been dedicated by Boeing Aircraft Co. at Seattle and named the Edward T. Allen Memorial Aeronautical Laboratories in honor of the famous Boeing pilot and engineer who lost his life last year in an airplane test accident.

Boeing engineers say the new Boeing experimental laboratory can produce wind in the 300-mile-an-hour range, and that at the fastest air may travel to the country with jet sections more than two feet in diameter.

►**Ceremony.** — The new tunnel is a self-contained research unit, complete with model design and construction facilities and computing laboratories as well as aircraft testing quarters.

Wellwood E. Bell, Boeing vice-president in charge of engineering, discussed the aviation developments which promise to cause all the results of wind tunnel experimentation and told the audience at the dedication that the speed of

sound is the barrier which confronts aviation engineers today in their quest for greater speeds for aircraft.

►**Speed of Sound Factor.** — Until we can solve the riddle of this mysterious barrier, Bell said, the tantalizing possibilities of such developments as jet propulsion is as far as speed is concerned, will be governed by and limited to the speed of sound. We need to conduct an infinite amount of research at speeds approaching the speed of sound to find the answer."

The dedicatory ceremonies were marked by the posthumous award of the Guggenheim Medal for 1943 to Mr. Allen. The presentation was made to Mr. Allen's widow, Mrs. Eddie Allen, by Philip G. Johnson, Boeing president, on behalf of the Texas Guggenheim Medal Board of Award.

►**Tribute to Allen.** — Johnson said Eddie Allen has been rightfully described as the greatest test pilot of all time."

►**First 11-Foot Model.** — The tunnel was officially placed in operation by Mrs. Allen following the

award. Model planes, with wingspans up to 11 feet, or full-scale airplane sections of the same maximum size, can be tested. All test controls are centralized in the panel built before the test section at the same place where model observers sit.

The tunnel flow of air is created by a propeller-like fan 24 feet in diameter. The fan consists of 16 laminated spruce blades. It is mounted on the end of a 17-foot solid steel drive shaft, 14 inches in diameter, which connects the fan with the motor and clutch.

►**Electric Motor Used.** — The synchronous electric motor, built by Westinghouse, has a rating of 18,000 hp and maintains a constant speed of 514 revolutions per minute. The speed of the fan is regulated by a magnetic coupling or clutch, several times larger than any previously built, situated between the motor and the fan. The coupling, built by the Dynamatic Corp., operates on a magnetic principle and regulates precisely the speed of the fan so that airplane models or parts can be subjected to exact airfoil conditions.

The seven-foot model range, with an intermediate connection, can include this coupling, the ring on the motor side being magnetized so that when it turns, it pulls the other ring around in the same direction, thus transmitting power from the motor to the fan shaft through air.



Boeing Laboratories Named for Edward T. Allen. A model Flying Fortress is always being tested in the high speed wind tunnel dedicated by Boeing as a major section of the new Edward T. Allen Memorial



Aerospace Laboratory Photo at right looks down the long basic section of the tunnel in which high-speed velocities up to 700-miles an hour are attained to check reactions of heavy aircraft and equipment.

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Even this small nutcase
weighing but 3.5 pounds
can move 1200 pounds.

WE wouldn't tell you how fast America's fighting planes go. That's a military secret. But we all know they hit 300 or 300 miles an hour. When and how they hit 300 or 300 miles an hour is down. And how fast was pealed by the air pressure. Did you ever stop to think that the plane's flags and outside lights work surely, smoothly and dependably against pressure like that?

We do our best to make them as we see them. They are called Lear Aviators. They are powerful. Some can pull up to 75,000 pounds. They are light. That's a "must" in aircraft. They are small. They have to fit in available space.

A good many present-day aircraft go by the board to meet all these requirements. For example, the last electro-motor that can run is full of revolutionary engineering efficiencies.

Every now and every minute we have new ones made at the works and factories that we would like to deliver for Lear Avia's aircraft.

For the day is coming when they will have different jobs to do. New jobs in passenger products—perhaps the steering wheel, or parking oars, or things we've never thought of.

That is one reason for this advertisement. We want to know who can be an aviator or a worker like these. Another reason is, we want you to know that there is another kind of thinking and engineering which has produced aircraft over 1200 miles per hour.

Registers Tests Made—The tunnel was built by the Austin Co. on Boeing specifications. An intricate balance-decoupling system of balances capable of measuring, with great accuracy, 35 feet from one-tenth of a pound up to 1,800 pounds and records all the forces acting on the model being tested, such as lift, drag, yaw, pitch, roll and side force. An ingenious automatic printer will record and print on a tape all the forces acting on the model.

The tunnel has a complete, omnidirectional structure which follows an approximately rectangular course 450 feet in length. It varies in size from eight feet by 12 feet in the throat or test section to 27½ by 27½ feet at the largest part.

450-Foot Circuit—When operated at maximum speed, the air completes the 450-foot circuit in less than two seconds. Research at 11 percent of the air in the wind tunnel is suspended and replaced with fresh air at every wind trip for cooling purposes, under high speed operation the air in the tunnel is completely replaced with fresh air three times per minute.

An aerodynamics laboratory supports the wind tunnel with a repair shop, assembly and model building shop, an air flow flow and measurement offices and travel operations on the second, an arrangement which permits engineers to design, build and test models in the same building.

NEMA Organizes Aircraft Council

Aircraft Electrical Council, subdivision of the National Electrical Manufacturers Association, has been formed with a membership of approximately 30 NEMA companies.

The council is designed to provide more effective contact between the aircraft and electrical manufacturers and the NEMA officials. It is planned to provide aircraft producers with experience and facilities of electrical manufacturers and to provide member companies with performance and production requirements of electrical equipment for aircraft applications and to develop plans and specifications. Offices will be maintained at NEMA headquarters, 125 East 44th Street, New York City.

Coast Guard Tests Navy Helicopters

Expect to have 22 in service by June 30 and 185 in about a year, Waschke reports.

Coast Guard is doing all the experimenting on helicopters for the Navy, expects to have 12 in service by June 30 and 185 by June, 1945, testimony of Vice Admiral H. B. Waschke, in connection with the Navy Department's appropriation bill he received.

None of the helicopters has been put into active service, and the "four or five" completed are being used exclusively for training.

Belluk Pilots Trained—Admiral Waschke and six pilots have been trained and are serving as instructors. He revealed that "something like 30 or 35 British pilots are in training now."

The Coast Guard Commandant termed helicopter development very promising, saying that the "certain search problems, or landing on ship and taking off from ship other than an aircraft carrier, they are practically the only thing in existence right now that will do it."

Two Crashes Reported—Two helicopters have crashed, the admiral revealed, one a Coast Guard ship and another an Army helicopter. The Coast Guard crash was due to personal failure, while Waschke said "I think one several months ago was due to the failure

of a machine the Army was flying. As a result, all helicopters were grounded until the trouble was discovered." He did not reveal the cause of the crash.

The big difficulty with helicopters, Admiral Waschke testified, lies in the low lifting load factor. Experts, he said, believe there is a "certain limit which they will reach whereby, at the present, they do not see their way clear to go farther in the way of the lifting load."

Ford P & W Motor Output Up 45%

A 45-percent increase in production of Pratt & Whitney 2,308-hp aircraft engines during the last three months is reported by Ford Motor Co., which attributed the gain to perfection of manufacturing methods.

Details of methods in engine manufacture were not disclosed, but the company did report a changeover in airplane parts fabrication, which reduces mounting processes.

Eliding Time Saved—Two spans are completed and 250 miles are covered in a single operation under that method. Ford reported that total time consumed by the press for glazing the aircraft, riveting and docking is 10 minutes, or two minutes for each spar as compared with 25 minutes per spar for hand riveting.



WARWICK IN RAF TRANSPORT SERVICE:
The Royal Air Force is using the Warwick as cargo transport, as passenger and freight carrier and other capacities. The ship is a medium monoplane, with two Pratt and Whitney Double Wasp Engines.

TRANSPORT

Prospective Return of 24 Planes Brings up Negotiation Problem

Fairness must be worked out to account for depreciation, repair and conversion costs, spare parts and other factors.

By MERLIN MICKEL

Negotiations are in progress to determine how 24 planes are to be distributed among the airlines as their expected return from the Army fits this month and June.

The determination is complicated by the fact that these planes, for the most part supplied by DC-4 with the Army designation of C-49 or C-53, were not leased but were purchased outright by the War Department from the airlines more than two years ago.

FAIRNESS — **Sought**—This means that a formula must be worked out to account for depreciation, cost of repair and conversion, spare parts and other factors. In consideration of individual conditions, the formula must be applied to each plane.

Interest lies not only in the fact that the formula may provide a starting point for the agencies interested in disposal of surplus planes after the war, but may be applicable to further return of planes to the airlines during the war.

Others May Be Released—There is little doubt that other planes may be made available to the air-

lines from the original take-over. These are of the so-called "minor types," such as Boeing 347-D's and Lockheed 10-A's. Eleven are Air Force, including 20 of the former and 14 of the latter, but some of the Boeing planes have sold to the American and South American lines.

How many of these remainder may go back to the lines has not been decided, but reports are that it will be a substantial number. Furthermore, these planes may precede or coincide with that of the modified DC-3's. Certainly it will not require much more time than the contemplated turn-back of the latter.

There is some doubt whether such minor types of craft as the Electra and 247's will go back to regular scheduled service, but they may be suitable, it was pointed out, for pilot training or other auxiliary services.

Return of the C-49's and C-53's, some sources say, virtually "clean-cut" planes of this type acquired by the War Department from the airlines, except for those in contract operation. Others so identified commercially were put in Army

service.

Plans concerning presents a problem on the returned planes, but the airlines do not feel that it is insurmountable. Usually each ship turned back requires an additional four pilots and equal number of co-pilots if it is to be placed in scheduled operation.

Service Increase Likely—Major benefit from the addition to the airlines' equipment is anticipated through increased staff and service. More than half the mad act by air in recent months has been delayed or shifted to train because of lack of planes.

No marked effort is looked for so far as civilian non-priority passengers are concerned, since the military backlog and others with priorities may be expected to speak rapidly for any additional seating space that becomes available.

Original plans were that 27 planes should be made available for domestic use in the current return. This later was cut, however, to 24. More than 350 were taken by the Army originally, leaving more than 60 airline planes still in Army service.

Availability Problem—Much as the airlines desire more planes, there are many questions where these are concerned that have not arisen previously. The availability of parts is one of the most serious.

In the more distant future lies the question whether C-49's, cargo adaptions of the DC-4, will become available, and whether certain airlines will welcome their return, considering the reconditioning they will entail. Here, as elsewhere, lots of parts and availability of replacement to replace the changeover to passenger use will have a bearing.

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Particular interest in the order was expressed by Howard Baumgardner, American's supervisor of load service. American reports it handled 7,696 passengers during 1948, thereby discovering that for the past nine consecutive years it annually carried more passengers than any other airline. In its first year of record, American's passengers numbered 379,635.

PCA Uses Fiber Trays—PCA esti-

SMALL PACKAGE AIR CARGO CONTAINER

This container has been designed by the aircraft division of Evans Products Co., Detroit, as an answer to the problem of handling air cargo in small packages. Flying against the plane ceiling in flight, the container is unfurnished as ever and draped for load-

ing or unloading. It weighs $\frac{1}{2}$ pounds, and carries an ultimate load of 1,000 pounds. The company anticipates that American and Transoceanic & Western Air indicate the container is a satisfactory solution.

Paper Priority Ruling Hailed by Airlines

Most seen as WPB recognition of need for professional service as well as production is moved.

A War Production Board order giving a priority applicable to paper rigs and food containers for airline passengers brought grateful comment from some of the airlines.

Pan American and American were among those who found in WPB's action recognition of the importance of essential travel, appreciable in view of a paper cup shortage caused by Army, Navy and War plane demands.

Priorities — Pennsylvania-Central, which received setting funds for its passenger and cargo fleet, after dropping the caption as a war measure, commented that since a large proportion of airline passengers are traveling on priorities, it is fitting that their should be priorities on their convenience.

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PCA Uses Fiber Trays—PCA esti-

mates about 8,800 a month. Originally intended to use a cartboard tray and box, it has been modified to a tray and lid with a fiberboard insert. The fiber feed officials say that, while a metal carton of the tray type is much higher than a cardboard tray, it is expected to be less expensive in the long run, because it can be washed and used repeatedly, while the tray at the other type would be thrown away after each use.

They asserted that PCA, like some of the other airlines, feels that food better suits to the passenger when eaten from china. Pennsylvania-Central and United, for instance, use a three-course, five and six-course meal.

Attendance — Attendance from Arkansas, Colorado, Kansas, Louisiana, Missouri, New Mexico, Oklahoma and Wyoming, representing managers, airline managers, food bank operators, flight schools, airline operators and applicants, CAP officials, and state aviation officials.

Aviation Forum — The meeting is arranged as an informal discussion of the Southwest's aviation problems.

Persons attending are invited to tend in questions in advance. The meeting will open at 10 a.m. with a discussion of questions not in Administrator Stanton will speak at a luncheon, and another discussion session will be held from 2 to 4 p.m.

and the latter reportedly is planning to use china cups. American uses plastic plates.

Pan American employs different services, but uses paper extensively for sandwiches and insulation.

Stanton to Address Southwest Air Forum

Airplane problems to be discussed at Oklahoma City meeting May 26.

Charles L. Stanton, CAA administrator, will be the principal speaker at the one-day Southwest Civil Aviation Forum to be held Friday, May 26, at the Skirvin Hotel in Oklahoma City.

Attendance is expected from Arkansas, Colorado, Kansas, Louisiana, Missouri, New Mexico, Oklahoma and Wyoming, representing managers, airline managers, food bank operators, flight schools, airline operators and applicants, CAP officials, and state aviation officials.

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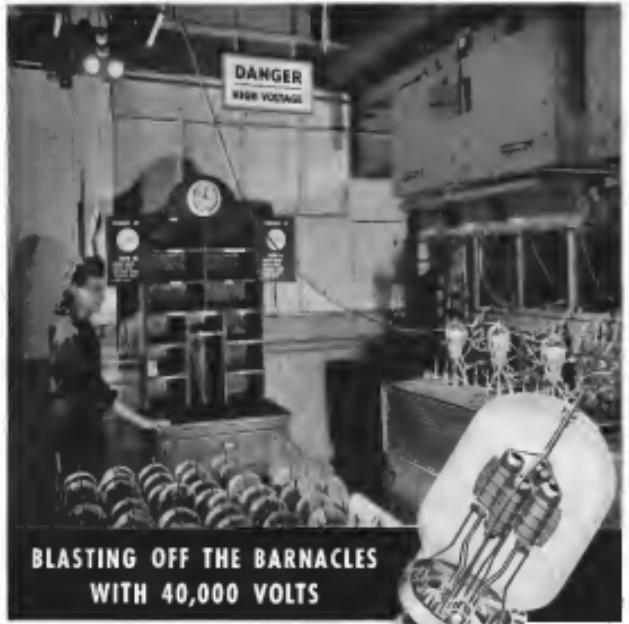
RAILWAY EXPRESS MEN DISCUSS AIR OUTLOOK:

Executives and operating officials of Railway Express Agency met in New York to confer as plane Photo shows, left to right: P. H. Cunningham, air traffic supervisor; M. G. Lickteig, E. L. Head, F. M. Grindley, air express manager; C. E. Graham, vice-president, A.

L. Russell, vice-president and chairman; J. M. Shampay, executive representative; C. A. Frey, traffic vice-president; K. R. Merrill, general manager, public relations; C. G. Petersen, chief engineer, and R. W. Starkey, air express manager.



For American Lines, Passengers expect to wash paper in used in serving as airline handups. This "typical" Pan American layout includes soap, salted, four sandwiches, napkins and milk, cake, apples and candies.



BLASTING OFF THE BARNACLES WITH 40,000 VOLTS

To protect Gammatron against filament breakdown, one of the most common causes of vacuum tube failure, Heintz and Kaufman Ltd. employs an exhaust process so rugged that only tubes made with certain elements can survive it.

"Blasting off the barnacles" occurs just before Gammotrons are sealed off. Already these tubes have been run at 3,000° F. for more than half an hour, and have been exhausted to 1/10,000,000,000 of atmospheric elements can survive it.

A red light flashes, and a warning bell rings as 40,000 volts are applied between grids and plates. A blue-white flicker marks the passing of the last bit of gas.

Before a tube can endure such punishment it must be built like a Gammotron—clean and sturdy, with no internal insulation or chemical garter. Then it will take the kind of exhausting that leaves it hanging on the air for thousands of hours.



THE 40,000-VOLT GAMMATRON is a high voltage, low impedance tube capable of passing large amounts of current. This size and configuration of features is made possible by the use of four separate sets of tube elements operating as parallel electrodes in a glass envelope. Max. plate dissipation, 500 watts.

* CUT AN EXTRA HOUR DOWNG THIS MONTH *

HEINTZ AND KAUFMAN LTD.
SOUTH SAN FRANCISCO • CALIFORNIA, U. S. A.

Gammotron Tubes

ton said: "... I can think of no one better qualified to administer it than Welch Fugate."

CAA EDUCATION PROGRAM—Recommendations for the vigor of his support of the CAA's national education programs is due El A. Hark, CAA regional manager, South Region, and his staff at Santa Monica, Calif.

He has just completed, at Salt Lake City, the fourth of a series of training meetings for high school teachers who, in many cases, are charged with giving their students preflight classroom training, but who have never been in an airplane.

Hark sees to it that, during training meetings, the teachers, arranged in groups of ten, get roles in CAA planes, witness air traffic control in the air as well as in the flight tower and have convinced that they can equip their students with basic knowledge for growing up in an air age.

In air rate rate cases, two questions involving Board jurisdiction,

two questions of approval of ap-

pliance and four rates authoriza-

tion cases comprise those in which decision is pending.

Voluntary Testimony—In such cases the Board often must study

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Of the mail rate cases now be-

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Airlines and the fourth Conti-

nental Airlines. Under the Civil

Aeronautics Act, the Board is re-

sponsible for setting a reasonable

rate of compensation for transpor-

tation of mail.

In a report on the crash of an American Airlines DC-3 last July 22, at Louisville, Ky., the Civil

Aeronautics Board found that the plane had been crashed in a violent

downburst in a thunderstorm, and

recommended that more thorough

meteoro logical study be given to

such storms as the interests of

safe flying.

The Board has discussed with

the U. S. Weather Bureau and the National Advisory Committee for Aeronautics the possibility of gathering "more information on the dynamics of thunderstorms and more accurate methods of forecasting severe developments," the report stated.

Flying AM 22—At the time of the

crash the plane was flying Ameri-

cain's AM 22 between Louisville

and Nashville at night.

The investigation revealed that the pilot

probably thought he had found a

safe path through the storm when

the plane was caught in a violent

column of descending air and

forced at an altitude of 1,300

feet to the ground.

Passenger and four

crew members were killed as a

result of the crash.

12 Cases Await Final CAB Decision

Four airline and non-airline

parties, two associations and

four route authorities

case.

By DANIEL S. WENTZ II

Twelve cases involving 21 dockets had passed through all the necessary procedural stages and were waiting final adjudication by the Civil Aeronautics Board itself at the month's end. Five of these termination cases had rate. Right have been submitted in 1944.

Four rate and route cases, two quantum involving Board jurisdiction, two questions of approval of application and four route authorization cases comprise those in which decision is pending.

Voluntary Testimony—In such cases the Board often must study thousands of pages of testimony in each docket.

Of the mail rate cases now before the Board, three concern Pan American and the fourth Continental Airlines. Under the Civil Aeronautics Act, the Board is responsible for setting a reasonable rate of compensation for transportation of mail.

In a case submitted to the Board

in March, separation of Mayflower Airlines by Northeast Airlines is in question. Examiner Frank A.

Low, Jr., has recommended that the purchase be approved.

Precision Aviated—Western's application of Inland Air Lines,

which has the approval of Examiners Thomas L. Wren and Barron Fredrick, is also waiting decision. The Air Lines Pilots Association was an intervenor in this case when the minority rights of Inland's pilots became involved in the transfer. The contract of separation failed to insure these rights.



INNOVATIONS IN PCA'S RECONVERTED PLANE:

Pennsylvania-Central Airlines claims several innovations in this ship following its return from duty with the Air Transport Command. Notable in the reconstruction to passenger use are the new seats designed in this interior and, lighter than seats in other PCA planes, they have a new type of seatback which is controlled by a lever on each seat instead of the usual handle. Seat breaking is expected. The seats are manufactured by Warren MacArthur Co. Ozone-Corning Fiberglass is used for curtains. Carpeting is a light weight type of fabric installed to prevent slipping.

The Board is also called upon to decide whether Hutchinson, Kan., should be added as a stop on Continental's proposed route AAF 68 between Denver and Tulsa. TWA and Braniff also had sought to serve Hutchinson, but Examiner Lawrence J. Kosters found in favor of Continental.

Intercollegiate Paint Cases—Other intercollegiate post cases include a requested stop by Braniff at Lubbock, Texas; an AM 15 and a stop by American at San Antonio on FAM 28. Examiner Thomas L. Wrenn recommends that both requests be granted.

Braniff and Eastern objected to the San Antonio stop, asserting that it would have an adverse competitive effect on their traffic. The examiner awarded the stop to Braniff on condition that it be used only on round trips between Memphis and St. Louis, Arkansas & New York.

OPPORTUNITIES

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CHIEF INNSHAN—Must have design experience in all metal construction.

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SENIOR and JUNIOR LAYOUT DRAFTSMEN—Engineering Layout, Body Group; Mechanical, Power Plant, Flight Controls, Instruments and Furnishings, Electrical and Communications.

SENIOR and JUNIOR DETAIL DRAFTSMEN—For work in all groups. Experience in Aircraft Engineering is desired, but not essential. A thorough working knowledge of Mechanical Drafting is necessary for all grades above Detail Draftsmen.

ALL APPLICANTS MUST BE ABLE TO SECURE STATEMENTS OF AVAILABILITY

Send applications with complete detail of your experience and qualifications to Dept. F, Kellett Aircraft Corporation, 2001 Broad and Locust Street, Upper Darby (Philadelphia), Pennsylvania.

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14 1953 a helicopter flying over the occupied Aden Road in its back Pot range



15 1953 A helicopter in flight at Aden, seen from below during training



16 1953 A Bell 47 Helicopter in flight over San Francisco, Calif., Jan. 20



17 1953 U.S.A.F. Bell 47 Helicopter in flight over Southern California



18 1953 Bell 47 Helicopter in flight over the Army Air Forces' TD-1000



19 1953 A Bell 47 Helicopter in flight over the Army Air Forces' TD-1000

ATA Given Data On Clearing House

Nearly \$4,000,000 worth of airline business headed in first month, manager reports.

The new Airlines Clearing House, Inc., has handled nearly \$4,000,000 worth of airline transactions in the first month of business. A report by Lowell N. Harter, vice-president-travel and personnel manager, indicates that air travel is increasing satisfactorily, though slightly schedule because of lack of equipment.

Harter's statement, transacted on March 26, was on the agenda of Air Transport Association's board of directors.

The new Airlines Clearing House began operations last January, with a set-up approved by the Association and ATA's Airline Finance and Accounting Conference. Central Bureau—Described as a central bureau to clear interchange transactions in North America, involving domestic and Canadian lines, the corporation's work is intended to expedite settlement between the lines on passengers, refunds and excess baggage. In the past, airlines followed their own checking methods to handle transactions with other lines. Direct sales with no interim implications still are handled by the individual lines.

Offices are in Chicago, with a staff personnel of 18 headed by Manager Harter. Most of it is clerical help and persons needed to run the card-punch machines that are the nucleus of the system. Largest salary goes to Harter, who receives \$500 a month. Total monthly payroll runs to \$3,800. The manager's budget estimate for the entire expense of running the office during 1954 was \$60,750.

January Figures—In volume terms for January showed that 123,774 items were cleared with a total dollar volume of \$1,036,829. This includes total U.S. and Canadian possible of \$1,031,879 and recoverables of \$3,661,222. Items handled \$3,312 payables and \$6,684 receivables.

American Airlines had the greatest dollar volume with \$694,823, and the greatest number of items with 26,451. Next were United with \$164,891 and 19,284; TWA with \$481,821 and 14,465; and Eastern with \$437,578 and 14,023.

Pennsylvania-Central reported dollar volume of \$223,800 in 6,097 items. Other lines in order of dollar volume were Braniff, Northwest, Delta, Western, Chicago, National, Mid-Continent, Continental, Trans-Canada, Colonial, Northeast, Island and Canadian Pacific.

New Runway

Lindbergh Field at San Diego is to be augmented by additional runway.

Facilities of Lindbergh Field, San Diego's airport, are soon to be augmented by the addition of an 8,000-foot runway paralleling the existing east-west runway. Construction of the \$1,000,000 extension will receive the airport grant.

Private Flying Outlook—Stadium pointed out that the high cost of helicopters and the physical requirements for a pilot's certificate would give very great incentive to private flying.

The Civil Aeronautics Administration feels that some federal-state partnership is the most economical way to finance airport development.

Schadle Stresses U. S.-State Port Plan

Following Civil Aeronautics Administrator Stanton's lead, Webb Schadle, general counsel of the CAA, re-emphasized the federal-state share-the-expense plan of equipping small airports to meet port-use needs in an address before the National Association of Cost Accountants at a conference in Baltimore.

An estimate of the future magnitude of port use was conservative, but he pointed out that whatever developments the future may hold must be based on number and quality of airports available. He, like Stanton, places the port-use requirements at 6,000 airports.

Private Flying Outlook—Stadium pointed out that the high cost of helicopters and the physical requirements for a pilot's certificate would give very great incentive to private flying.

The Civil Aeronautics Administration feels that some federal-state partnership is the most economical way to finance airport development.

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Canada to Divest Roads of Airlines

Breakup of CPA into original companies forecast in Howe statement.

So closely will Canada's new Air Transport Board be factored after the Civil Aviation Board that it will be necessary for competing railways to drop their airline business.

The reason, according to a statement in the House of Commons at Ottawa by C. D. Howe, Minister of Transport and Supply Minister, that Canadian Pacific Air Lines will be broken up only its original operating companies.

Under Control—The

Air Transport Board, which is soon to be established, will be part of the Civil Aviation Branch of the Department of Transport, so that the government will be able to keep a hand on aviation policy.

Separation of air services and railways has been encouraged in Canada's interpretation of the law that effectively has prevented entry by surface carriers into air transport. It includes **Two Companies**.—Canadian Pacific Air Lines consists of ten companies purchased in their entirety or in part by Canadian Pacific Railway in recent years, most since the start of the war, although the CPR had an interest in some of them for a decade. A number of the companies were in a precarious financial position when taken over by CPA. Minister Howe said that separate entities would be re-established, and assured that no major airline had been bought at reasonable prices and could be regained without loss in revenue.

The companies which make up CPA cover all parts of Canada. oldest is Canadian Airways, with headquarters at Winnipeg, which had operations throughout the northland and along the north shore of the St. Lawrence River. Quebec Airways, operating out of Montreal, spanned north of the St. Lawrence River. Dominion Skysways operated out of Montreal. Arrow Airways operated in southern and northern parts of the Prairies. Western Liner, with headquarters at Vancouver, covered mostly southeastern Ontario and northern Manitoba.

Fraternity Service—Prarie Airways operated intensively air service out of Moose Jaw, with some northern flying. Yukon Southern Transport, with headquarters

at Edmonton, operated air service along what is now the Alaska Airway from Vancouver to Dawson, Yukon. Greater Coast Airways operated out of Vancouver into running segments of British Columbia. Starline Airways covered a vast territory in northern Ontario out of Sudbury. Mackenzie Air Service operated a route from Edmonton to Athabasca and Coppermine, north of the Arctic Circle.

In addition to these lines, CPA took over some air freight schools and a number of smaller companies to form its training arm for the British Commonwealth Air Training Plan.

Policies to U.S. Policy—Minister Howe said the government had come to its decision, without consulting the railways, to direct the railways of their air services because experience has proved this best.

The government has decided that small operating companies, in addition to the CPA air routes which will be broken up, will be established on an exclusive basis in any area. Retired armament, aided by the government's new industrial development bank, or by private business, would be given a route and seasonal and

Panagra Election

Re-elected directors of Pan American-Globe Airways, Inc., included Alceo J. Ricci, president; Howard B. Dean, who was also elected vice-president; W. F. Cowgill, A. Gurne, H. Preston Morris and B. H. Pritchett. Henry Fendtly and Erwin Ballader were elected directors to succeed George L. Reid and Ervin E. Young. Ballader's election is subject to CAB approval.

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TOOL AND GAGE REPAIRERS
REASSEMBLY ENGINEERS
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To arrange for interview, please write United Electrical Engineers, 1101 Central Avenue, Los Angeles, California, or Employment Supervisor.

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East Hartford, Connecticut

All reply shall be done in confidence with the New Amsterdam Telephone Company.

SHORTLINES

Allegany County, Pa.—Commissioners have approved a \$600,000 bond issue with the view to raising funds for improvements for the Pittsburgh's (U.S. 30) Airport, a \$150,000 project. The bond issue will permit dredging of the port and purchase of such additional land as is necessary.

American Airlines has added a daily round trip to its schedule between Los Angeles and Chicago, via Phoenix.

Delta Air Lines, through addition of a plane released by the Army, has six other daily transcontinental flights between New York and San Francisco.

A Martin Mariner, owned by a Pan American Airways subsidiary, completed the first flight from the Miami Air Transport base, and accomplished a rescue in a heavy sea by picking up 45 survivors of the transpacific SS Cape San Juan, torpedoed in the Pacific. The War Shipping Administration reported that 150 lives were saved.

National Airlines reports that its Lockheed fleet recently set a record of two hours and nine minutes between New Orleans and Jacksonville, Fla. The flight, which flew from Miami to Key West and return in an hour and a half, with three minutes for the turn around at Key West.

CAB ACTION

Civil Aviation Board has received the report of the Small Aircraft Committee to the Civil Aviation Board. The committee's recommendations are to be considered by the CAB in its final decision on May 15. The report criticizes the old Oshkosh panel of experts, criticizing one of the members of the panel as being one of the worst.

International, Inc. has filed a complaint against the International Harvester Co. of Canada, saying that the company has given preferential treatment to its employees in Canada. An investigation of the complaint has been started.

James M. Alman has had an amendment to his application to the Small Aircraft Committee to the Civil Aviation Board to be considered made by Robert C. O'Brien, chairman of the committee. O'Brien has asked the committee to consider the amendment to Alman's proposal to increase minimum weight requirements for small aircraft. He said O'Brien has an analysis of weight-lifting load service factors, factors, and other factors which indicate that the proposed amendment to Alman's application for an increase in the weight limit for small aircraft is justified.

McDonnell has filed an complaint with the Civil Aviation Board against the Boeing Co. of Seattle, Wash., and the Douglas Aircraft Co. of Long Beach, Calif., for their failure to submit to the Civil Aviation Board a detailed solution to the Small Aircraft Committee's proposal to increase the weight limit for small aircraft.

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Any state that may have been liable to Alaska Airlines' Atlantic Seaboard Division for damages resulting from the accident will be liable to the Civil Aviation Board.

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FINANCIAL

New Survey of Profits Shows Aircrafts Near Bottom of List

National City Bank analysis of 2,625 corporation reports reveals average of 3.6 percent compared with 1.8 percent for aviation manufacturers.

By ROGER WILCOX

Aeronautics—Profit margins determine the extent of earnings and have long been given prime consideration by investment observers. Their importance is highlighted by the interesting statistics revealed by the National City survey. Some interesting contrasts are afforded by other comparative industrial groups for 1943. Automotive, 13.2 percent, shipbuilding, 25.8 percent, and railway equipment, 8.8 percent.

A group of 20 drug and soap companies showed the highest profit margins among the entire lot—14.4 percent in 1943. As a result, with total sales of \$641,071,000, net income of \$60,878,000 was reported. By contrast, the aircraft group with sales of \$1,343,979,000, or more than three times that of the soap category, earned but \$59,583,000 or about 7 percent less. The explanation can be found in the prevailing difference of profit margins.

Aerospace—Similarly, the pharmaceutical group showed average returns of 1.6 percent in 1943 and experiencing a material decline from the 3.7 percent reported for 1942. Only one industry—metallurgical—and lower profit margins, 1.1 percent in 1943 and 1.2 percent in 1942. However, the percents have traditionally been known for their low profit margins but have greatly experienced sustained profitable operations because of the tremendous volume of business conducted.

It is, nevertheless, significant that the drop in profit margin for 1943 over 1942 was the greatest for the aircrafts—almost 30 percent. This was by far the sharpest decline shown for any of the 35 industrial groups presented in the National City study. Further, the automobile group experienced a far higher degree of profitability than did the aeronautics. The former group showed an average profit margin of 3.2 percent in 1943 and 3.3 percent for 1942.

* Net worth includes book value of common stock, paid-in surplus, and capital and reserves of beginning of year. The figures do not include the results of other corporations, including railroads, public utilities, and several utility districts.

† Net worth includes book value of common stock, paid-in surplus, and capital and reserves of beginning of year. The figures do not include the results of other corporations, including railroads, public utilities, and several utility districts.

corded during 1943. These results were by far the best received among the entire lot of 35 industrial groups examined in the National City survey. The average for all manufacturing was but 8.8 percent for the two years.

Some interesting contrasts are afforded by other comparative industrial groups for 1943. Automotive, 13.2 percent, shipbuilding, 25.8 percent, and railway equipment, 8.8 percent.

Large Capital Turnover—Reason for the superior showing of the aircrafts, in terms of percent return earned on net worth, is primarily due to the fact that the group has operated on a large number of capital and has been greatly aided by the substantial extent of facilities financed by the government. As a consequence, the group's own capital investment has been relatively small.

It is interesting to note that the 35 aircraft companies used had an aggregate net worth of \$271,897,000 as of Jan. 1, 1943, and was up from the \$208,843,000 reported a year earlier. On the other hand, 20 automobile companies showed a combined net worth of \$103,932,000 at the start of 1942, or about 6 times that of the aircraft group.

Air Transport Earnings—The air transport group also came in for attention in the survey. Recent analyses were shown to have earned an average of 20.4 percent on their net worth for 1943, a slight decline from the 22.4 percent reported for 1942. This compares favorably with other transportation industries. For example, the return earned on net worth for 1943 compares as follows: railroads, 7.6 percent; traction and bus, 8.8 percent; shipping, 15.5 percent; and miscellaneous transportation, 8.2 percent.

A fairer showing is made by the aeronautics industry in the presentation of net income earned on net worth.* This summary also was prepared by the National City Bank and reveals the percent return earned on net worth or invested capital.

Average 3.6 Percent—The 35 aircraft and parts companies are shown and are reported as earning an average of 3.6 percent on net worth during 1943, virtually unchanged from the 3.8 percent re-

Capital Position Up—The two aviation groups, along with Ameri-

cana industry as a whole, have steadily augmented their net worth or invested capital position. This has been due to a policy of retaining a large portion of earnings and reinvesting them in the further enterprise involved. On balance, this has strengthened capital structures and is a circumstance that has particularly benefited both the aircraft manufacturers and air carriers

Navy to Stay Out Of Brewster Vote

Manufacturers' vote will be postponed for May 17 meeting. Kaiser still stockholder.

Elective officers at the annual meeting, May 17, of Brewster Aeronautical Corp., will be free of any direction from the Navy, stockholders have been notified by director through Henry J. Kaiser.

The announcement said that, in consequence, voting trusts holding approximately 25 percent of the company's outstanding stock will present their slate of slate names to vote at the meeting. Kaiser, in his letter to the stockholders, reiterated that it is not the intention of the management to addect process.

Stock Owners—Owners of the stock held by the voting trust are James Work, former chairman of the board and former president, and A. J. Miranda, Jr., L. J. Miranda and P. William Zoller, members of the partnership which contract as exclusive sales agent for Brewster in foreign sales was the subject of litigation.

The voting trust was set up when the Navy took possession of the plants and properties April 29, 1942. It holds 144,059 shares of the \$50-\$52 common outstanding.

New Door Fastener

A new type of quick access fastener, designed specifically for aircraft, is being made by Hormann Aeropressure, Inc., which says it is of special value on inspection doors and access doors to fuel tanks, and can replace cowling fasteners, lock nuts and other non-dash fasteners in applications that require frequent opening and closing. When closed it has four latches, awaiting air resistance, an advantage that proves in relation to the number of inspection doors on the plane's exposed surfaces.

2 GM Units Expand P&W Motor Program

Chevrolet and Buick disclose extensive remodeling plans.

Expanded programs for the production of Pratt & Whitney engines have been disclosed by two General Motors divisions—Chevrolet and Buick.

Chevrolet, with Chevrolet's completion of two years as a prime producer of P & W engines, M. E. Coyle, general manager and General Motors vice-president, has disclosed production 36 percent of all the aircraft engines manufactured by American industry in 1943.

Output at High Level—He disclosed that the output in 1943 was at a rate five times that of 1942 and is holding constant at a high level. In addition, Chevrolet is going into production of the new C Pratt & Whitney engine as disclosed by American News last week. Coyle said output of the new engine will be superceded by the present arrangement and conversion and retooling job that currently would require a year. Coyle said it will be compressed into seven months in order to produce the new engine at the earliest possible date. This engine already is being produced at Pratt & Whitney's new Kansas City plant. Seventeen plants in Chevrolet's system are allied in the P & W production job. Coyle said, that since engine No. 1 was built by Chevrolet May 10, 1942, the division had turned out 38,000 engines.

Buick Retooling—At the same time, Buick is retarding to make two additional types of Pratt & Whitney engines for Liberators and C-45. The new engines are to enter now. Work on B-17E, B-25 and B-26B-5 of different divisions and developing greater horsepower than current models.

Harker H. Curtiss, Buick general manager and General Motors vice-president, and two new supply executives have been appointed with the AAF Material Command, involving upwards of \$63,000,000 for initial delivery of a specified quantity of both types and added that a manufacturing program has been started involving retooling and machinery procurement to meet proposed schedules.

Schedules Up 22 Percent—Buick, he said, has delivered 45,000 engines to the AAF and has assigned to the company increased responsibility for supplying engines for the Liberator production program as well as the 1,650 cubic inch displacement for other aircraft engines. Schedules for 1944 are 22 percent above 1943 output.

surpassed responsibility for supplying engines for the Liberator production program as well as the 1,650 cubic inch displacement for other aircraft engines. Schedules for 1944 are 22 percent above 1943 output.

Carl Dolan Buys Essential Industries

Machinery and equipment of Essential Industries Corp. have been purchased by the newly organized Carl Dolan Corp. with offices at 139 Park St., New York.

Carl Dolan, president of the new corporation, is well known in aviation. P. A. Matthews is vice-president and treasurer, M. H. Hendrie, vice-president and secretary; Richard F. Kelly, sales manager, and Robert Beaumont, chief engineer.

P. T. Prudhomme—The company is one of the largest producers of quality tools, dies, gages, gauges, and fixtures for the aircraft industry on the East Coast. Twelve plants of machinery and equipment produce an annual four million dollars' worth of tools for companies such as Sperry, Bell, Curtis-Wright, Eastern Aircraft Division of General Motors, and Goodyear.

Northrop, Packard Lead in Work Ideas

Northrop Aircraft and Packard Motor Car Co. workers are among the leaders in worker suggestions per employee, the War Production Board said last week in revealing that 1,395 awards have been made to the nation's workers as part of a nationwide production suggestion program.

Packard, makers of the Radial-Royce Merlin engine, was second in the national totals, irrespective of worker numbers, with 136 awards. Northrop employees had received 37 awards.

Willys Output Up

Production of order-wing sections for the Navy Corsair fighter has increased 37 percent in the last three months over the preceding quarterly period at the Willys-Overland Motors plant in Toledo, the company announced.

Transport Leadership

UNBELIEVABLE transport planes already are unparalleled anywhere for their speed, technical efficiency and dependability, and economy. Furthermore, the U. S. at this moment probably has more multi-engine transport aircraft than all other countries combined and our production this year is breaking all records.

Next year's program is to be even larger. The four-engine transport production alone in 1945 will be several times the 1944 figure. Nothing like this tremendous schedule is under way or contemplated elsewhere.

Questions are being asked in the U. S. about the British transport production backlog. A consensus of responsible aviation authorities, including a few who have visited England, is that the well publicized projects there, announced from time to time in recent months, have been brought out mainly for the edification of local readers. They are paper planes, it seems, in response to outspoken criticism of the government for failure to have a single modern transport design which could be put into immediate production after the war and compete on even terms with American models.

Because of our present emergency in quality and quantity, this nation will be able to take over commercial airline leadership immediately after the war, restricted only by financial considerations. All of the foreign money in the world, public or private, cannot put together a challenging transport fleet overnight, without American planes.

These facts the Roosevelt administration must know. Its policies on surplus war transport aircraft, international air transportation, peacetime aircraft production, will determine whether we shall tie ourselves closer to inferior standards and the restrictions of lesser countries.

Given the right to set its own standards, American free enterprise will never allow us to forfeit the international leadership which can be won by right of superior production facilities and business acumen.

Military Responsibility

In its proposal for post-war organization of a single department for the armed services, the Army has squared one of the basic principles of our government:

High ranking officers last week in statements before the Woodrum Committee presented a terrible set-up which, if adopted by Congress, would violate every historic concept of the relationship between the American people and their military services.

The Army, under the plan submitted by Lieut. Gen. Joseph T. McNamara, deputy chief of staff, would relegate the civilian secretary to a minor administrative role and set up a joint chiefs of staff organization reporting and responsible directly to the President as constitutional Commander-in-Chief of the armed forces.

The President would have a chief of staff who would be the Chief of Staff Board. Although one witness stumbled about the exact chart of organization, McNamara was the ranking military officer testifying and his statement is explicit in his setting up of the chiefs of staff organization in direct control of strategy, budget and allocation of funds and units.

A basic tenet of this government has been responsibility of the Secretaries of War and Navy to the President and people. An Army chief of staff has been advisor to the Secretary of War on professional matters, and the chief of Naval Operations has functioned in similar capacity to the Secretary of the Navy.

The nation has never had a division of responsibility in the armed services. The chain of command has run straight through from the ranks to the top professional chiefs, then to the secretaries, and through the secretaries to the President. Control of military policy has remained in civilian hands. The armed services have sought to remove that control many times throughout our history, but so far have never succeeded.

In a scrutiny of the plan, Congress should study this feature carefully. We have never had a military caste in this country and the post-war need for one is not apparent now.

Secrecy is Unnecessary

Few consumers' activities other than waging war carry more vital implications to American industry than the current workings of the Staples War Property Administration. To the nation's aircraft and airline companies every move made on the surplus disposal picture has a direct effect on the future.

Yet no government source has been permitted as far as divulge the steps—past, present, or contemplated—in working out a policy. Officials close to the SWPA are themselves concerned with the mantle of secrecy. Members of the board have been instructed not to talk, and these instructions have filtered down through the various organizations, with the result that the SWPA is working behind the scenes to a greater degree than the Armed Forces, which have a logical and legitimate reason for secrecy.

Many working with the SWPA are in sharp disagreement with this procedure which, careful investigation appears to indicate, has been formulated at the highest levels and for that reason is being observed.

This policy will backfire inevitably. Any agency so important will soon find itself the subject of rumors and half-truths which will build up a distrust in the public mind difficult to eradicate.

The people must know what the Surplus War Property Administration is doing and why. Full press conferences held infrequently, with little specific information released, is not the answer to this question. It is another example of the failure to apply proper public relations to a government function.

Bennie H. Wood

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